

THE
SAFE GUARD
OF
SAILERS,
OR
Great Rutter.

CONTAINING,
The Courses, Distances, Soundings,
Floods, and Ebbs ; with the Marks for the Entring of
fundry Harbours of England, Scotland, France.
Spain, Ireland, Flanders, Holland, and the Sounds of
Denmark ; also the Coast of Jutland and Norway ;
with other Necessary RULES of COMMON
NAVIGATION.

Collected out of the Newest and Largest *Waggoner*,
and confirmed by the Practice and Experience of many able
Pilots and Seamen ; now Published for the Use and Benefit of
all Honest Mariners.



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Gate* near *Tower-Hill*, and *Penj. Hurlock* over against
St. Magnus Church near *London-Bridge*. 1671.



To the Friendly Readers, Sailers
and Mariners.



Seeing by the positive and divine Law of God, all Men be generally bound any way they are able, to be profitable and helpful to their Brethren, Countrey, and Common-wealth, for whose sakes, as much as for their own, they are Created: How can we but judge very hardly of their Meanings and Inventions, who publish and commit to the view of the World their Travels and Labours, to no other end, but to reap thereby either private gain or popular applause and commendation, as though indeed they were not thereunto by duty bound with their whole Study, care, endeavour, and all the faculties of the Mind whatsoever. From which sort of ambitious persons, as mine own Conscience doth clearly exempt me, so yet, nevertheless, I fear that I shall hardly escape the hard censure and critical doom of many Linxes, whose glancing penetrancy and quick Eye-sight, being able (as the Fable reporteth) to look through a stone wall, will (no doubt) be ready enough to encounter my honest meaning in simplicity, and be a great deal forwarder to find faults than able to amend them. Howsoever such severe Stoicks shall durin to think of me, my own Conscience acquitteth me of all sinister pretence; and what peremptory sentence soever shall be pronounced upon me, I doubt not

To the Readers.

but the better moiety of the Marine sort (for whose use this present Work is especially published) will accept in worth these my Pains and Travels.

Neither need I to fear (as I hope) any sinister constructions at the hands of those, which with indifferencie will weigh my meaning, and without prejudicate opinions consider my Labours.

For, as the Work is the Observations and Collections of divers and sundry experimented Travellers; so, if they any where be found somewhat in matters of small moment to jarr, or a little to disagree, consider that the judgments of so many men, be (and ever have been) divers and sundry.

However, it is hoped, that this Book (as it is now Enlarged, with much care and pains) will prove very commodious to those for whom it was chiefly intended; it containing the Courses, Distances, Soundings, Floods and Ebbs, with the Marks for the Entring of sundry Harbours of England, Scotland, France, Spain, Ireland, Flanders, Holland, and the Sounds of Denmark; and also the Coasts of Jutland and Norway; with other necessary Rules of Common Navigation. How much it hath been a long time desired, is known to many, who will hereby receive satisfaction: And that it may prove as the Title represents, and as it truly was intended, The Safeguard of Sailers, is the desire of him, who wishes all safety and Happiness to them, and shall do, whilst he is,

Their Friend to Serve them,

W. B.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

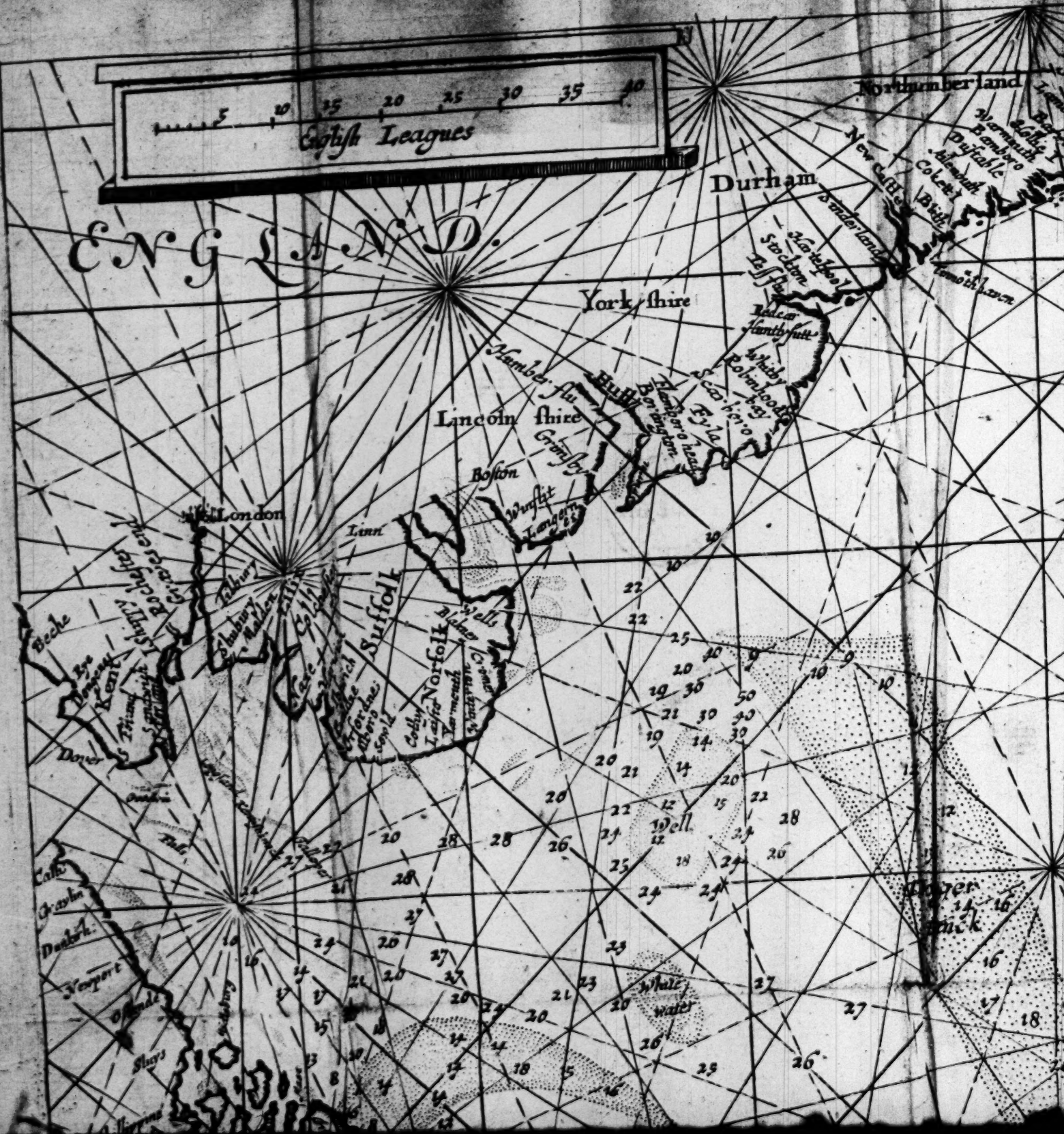
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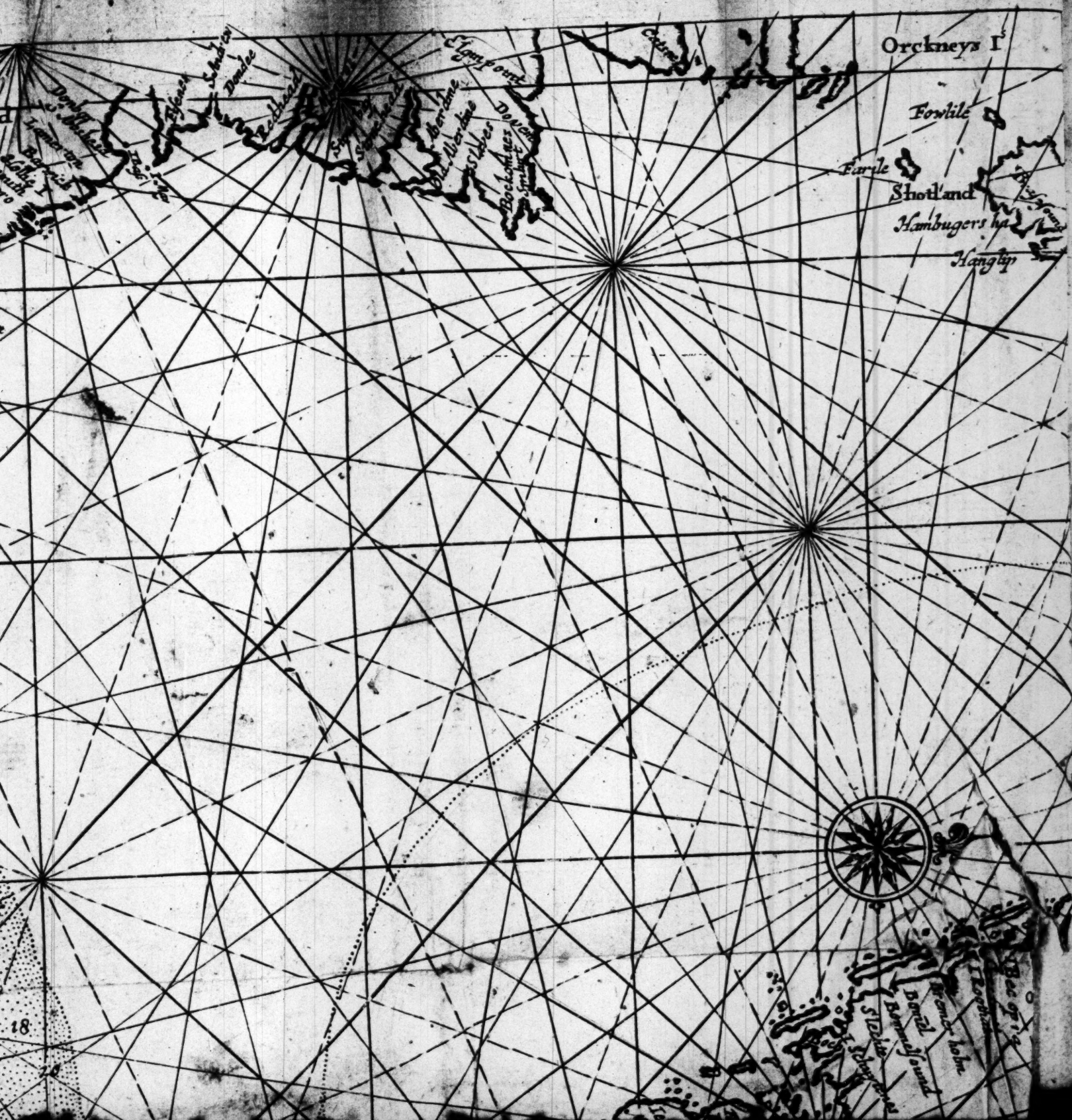
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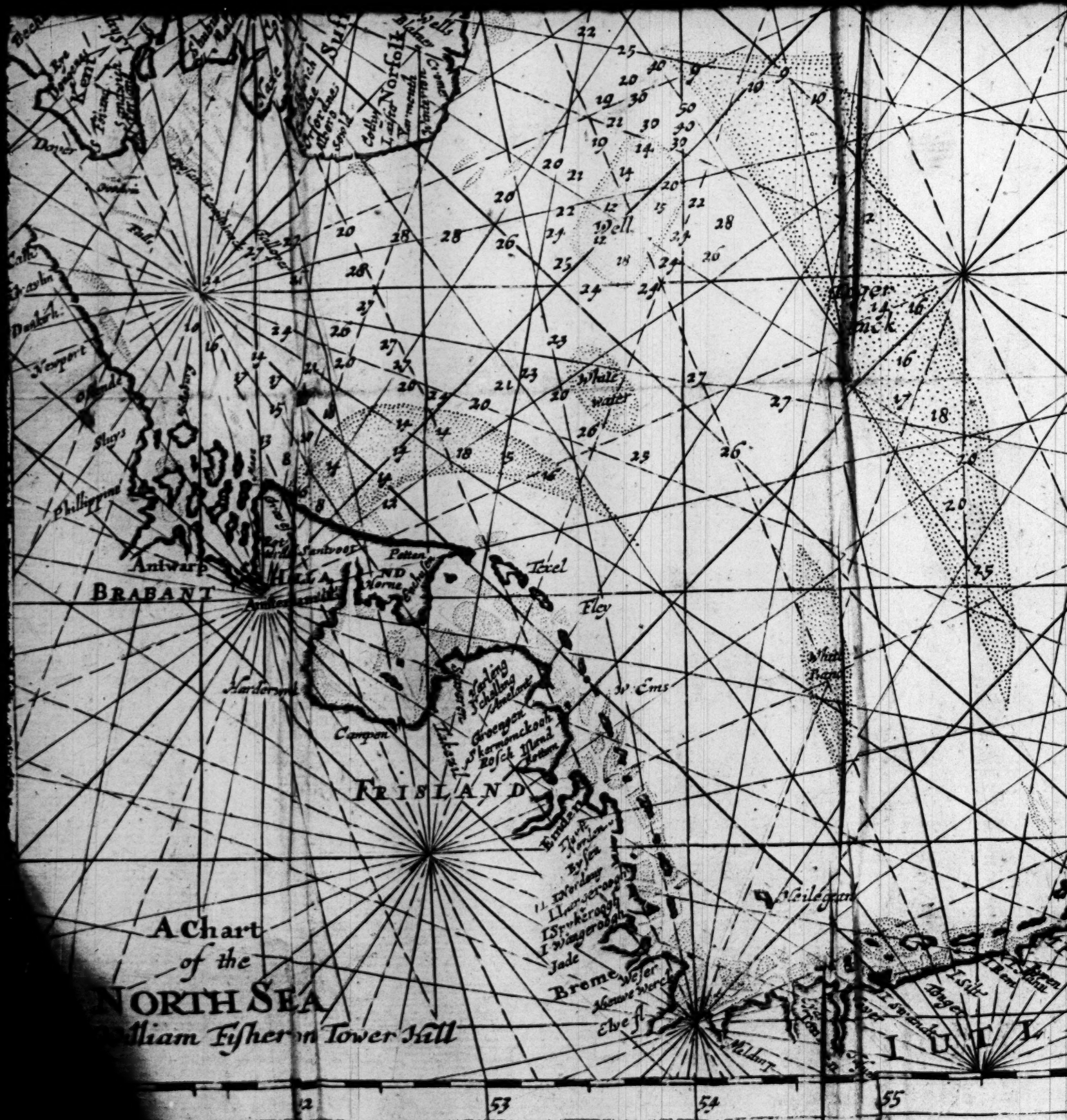
then boldly towards the Shore, and within two miles
along by it, for to avoid the North Ground, which had been



ENGLAND









I. DEMONSTRATION

*Of the Sea-Coasts on the East of
England, with their Markes,
Buoys, and Beacons, from the
River of London to Newcastle;
thence to Leith and Edinbrough
Scotland.*



By two ways men may go
of London, from the Sea
by the North Foreland, and
Northwards along by the
you will Sail in there north-
wards; then you shall see
North Foreland, which is a
good way from the shore of
North Foreland also not far
from you then Southwest, that you do not run
North Grounds, which lyeth far to Sea, and
the Land, run along by it, but come not too
lose sight of the Spire of the Steeple of
Land, for then you should come too near
is far from the shore, that you can see the
the high Land, or keep it even in your sight
the hurt of the South Grounds. Continuing
then you are past the forecast Ground, you
then you are past the forecast Ground, you
then you are past the forecast Ground, you

The East side of England,

the Southwards towards the Land, Sail on so West all along by the Shore, until *Roculvers*, which are two Steeples upon one Church, come one in the other, and then you shall run in sight of the first Buoy upon the *Lasts*, which lyeth upon the foresaid marks of *Roculvers*, being by it you can also see the other Buoy lying like as the first; also on the North side, and over against it on the South side standeth a Beacon, there you must Sail through betwixt them both, leaving the Buoy on the Star-board side, and the Beacon over against it on the Lar-board side. From thence you may with little Ships, or Ships of little draught, but not with Ships of great draught at high water, run over the *Swallow* West Northwest towards *Sheppy*, for it is there shoaldy water; with Ships of great draught you must run through the *Fishers deep* towards *Blacktail*. You can also run from *Margat* with small Ships along by the shore upon the Lead at high water even unto *Sheppy*; but in Sailing along, you must cast your Tides well, for the Flood falleth very strong into the *Swallow*, and the Ebb to the contrary, very strong out.

Sheppy.

The Spaniard.

The Nore.

When men come by *Sheppy*, run within two Cables length along by it, for to avoid the Tail of the *Spaniard*, until you are past *Quinbrough*, edge then off from the South shore for to avoid the *Nore*, which is a Sand shooting off from the South Point of the River, a good way to the Eastwards upon the outermost end whereof standeth always a Beacon whereby you may know it. Run along to the Northward of it, leaving it on the Lar-board side, and along in the middle of the Channel into the Sea-reach for to avoid the Grounds, which lieth off from the North shore, go in so along towards *Graves-end*.

To Sail with Ships of great draughts along by the North Foreland up into the *Thames*, you must when you are past the Buoy upon the *Lasts*, Sail through the *Fishers deep*, towards *Blacktail*, which lyeth from the second Buoy upon the *Lasts*, *Fishers deep* unto the first Buoy in the *Fishers deep* Northwest, and Northwest and by West, which lyeth upon the North side of the Sand, which men do call the *Spaniard*; these two Buoys lie a great way one from the other.

Sailing from the Buoy upon the *Lasts*, it is a great way all shoal water, so that you must run over there with high water, but

Between the River of London and Newcastle.

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but coming near the Buoy upon the *Spaniard*, it is by little and little deeper water. He that will Sail over here, must reckon well his Tides, the Flood falleth there along towards the South-west almost thwart over the deep, and the ebb to the contrary.

The second Buoy in the *Fishers deep*, you must leave on the Starboard, and the Buoy upon the *Spaniard* on the Larboard side; being past that, you come against *Black-tail*, to the Southwards of the *Shoebeacon* into the right Deep; the East Point of *Sheppy* shall then lie about South from you. From *Shoebeacon* the course is Southwest to the Point off *Black-tail*, there runneth off a Hook, which men might at unawares Sail within, coming from the Northwards in 5 or 6 Fathom; but if you keep from the shore in 7 Fathom, you cannot Sail within it. From *black-tail*, to the Beacon upon the *Nore*, the course is West South-west, leave it on the Larboard side as before is said, and run in along the River, in the midst of the Channel betwixt both Sands unto *Gravesend*.

For to Sail into the River of *London* coming from the North-wards, you must come near the Coast to the Northwards of *Ordfornes*, which is to the Northwards of all the Sands, there lyeth *Alebrough*, *Dunwich*, *Walderswike*, *Sowle* and *Covehit*, all betwixt the *Ordfornes* of *Leystaf*. *Covehit* is a sharp Steeple like as also *Leystaf*, but *Sowle* and *Walderswike*, *Alebrough* and *Ordfornes* are all flat Steeples. *Sowle* and *Dunwich* lie both upon the high Land, betwixt them both there is a Valley, therein you may see *Walderswike*, when you are thwart of it. *Dunwich* is the best to be known of all these foresaid places: it hath two flat Steeples, and on both sides some Trees. To the Southwards of it lyeth *Alebrough*, which is also very easie to be known, it hath one flat high Steeple, with three Mills, the two stand to the Northwards, and the third to the Southwards of *Alebrough*, when you are thwart of it; but Sailing to the Southwards they come at last all three to the Southwards of it. The Land without *Alebrough*, and to the Southwards of it is low flat and kindly Land.

Betwixt *Alebrough* and *Dunwich* about the midst betwixt them lyeth a Wood, that is at both ends high, and in the midst low with a Saddle; this you shall commonly see first as you fall

The East side of England,

with the Land thereabout, and is the best to be known for to know the Coast by. The Land without it, and to the Southwest is very low flat kindly Land. About two Leagues to the Southwards of *Alebrough* lyeth *Ordfornes*, betwixt them both stand also two Woods of Trees, which shew themselves afar off like Castles or Towers. *Ordfornes* hath a flat Seeple, with a broad Castle, that hath also a thick flat Steeple, almost of fashion like the Steeple of *Ruop* betwixt *Amsterdam*, open above with holes in it like as Bell-holes.

Before *Dunwich* you may Ankor, there is good lying in 8 or 9 Fathom, somewhat lost ground. Before *Alebrough* is the best Road of all the Coast thereabout in 6 or 7 Fathom.

Alebrough
Knock.

East from *Alebrough* about two Leagues lyeth *Alebrough Knock*; this is a Sand which at low water is not deeper than seven or eight Foot: you may sound round about it in five Fathom, but it is not good to come nearer it. With Sea winds you may discern it plainly by the breaking of the Sea upon it; but with Landerly or Westerly winds, and fair weather, the Sea breaketh not upon it; he that runneth thereby to the Northwards with an Ebb, shall see it commonly ripple very much upon it, like as upon most of the *English* banks, and not indeed upon the banks, but against them; for upon the shoaldest or midst of the banks is always the smoothest water, like as you find every where.

Alebrough.

When as *Alebrough* is West from you, and the two Steeples of *Ordfornes* are one in the other, there you shall find *Alebrough Knock*. These are sure marks of that Sand.

The *Whiting* or *Whiting-sand*, is somewhat a long small Sand, lying before *Ordfornes* and the kindly Land to the Southwards of *Alebrough*, and lyeth along the Reach, but the South end lyeth further from Land than the North end; there is at low water not above six or seven Foot water upon it. Coming from the Northwards, Men Sail commonly to the Westward of it, that is, through betwixt the Land and *Whiting-sand* towards the *Naes*. Men may also Sail along to the Eastward of it, through *The Court*, betwixt *Whiting-sand* and the Eastermost part of the *Court*, or *Court-sand*, which some call the *Rib*.

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The North end of the *Whiting* lyeth all along close to the shore, and lyeth from the Steeple of *Ordforne* Southeast and by South; it is so exceeding steep and nedle to, that you shall have the one cast 9, the next cast 5 Fathom, and then you are no more but a Ships length from it, before you can heave the Lead again you should be upon it. When as you tit with the Fore-ship against it, it is at the Stern 5 or 6 Fathom deep.

Along the Inner side, it is also every where so steep, that you cannot sound it, but on the Outer side you may run along by it in 5 Fathom upon the Lead, until you come within the Sands.

When as you come from the Northwards, and will Sail through within the *Whiting*, you must run close along by the shoar, and Southwest about by the Point of the Chindle to the Southwards of *Aleborough*, until you come within the North Point of the *Whiting*; when the Steeples of *Ordforne* comie to be Northwest and by North from you, then you are right thwart of the North Point of the *Whiting*, being within it go again more Southerly, (*viz.*) Southwest and by South towards *Balsy-Cliff*.

If you should fall to the Southwards of the *Whiting*, or else coming from the Southwards, will Sail in there to the Northwards, then bring the Steeples of *Ordforne* West Northwest, or Northwest and by West, but for all not more Northerly then Northwest from you; and Sail so right in until you come by the *Chindle-strand*, then run in along by it, as is before said, and then you shall run far enough along to the Northwards of the *Whiting*.

If you will Sail to the Eastwards of the Southwards of the *Whiting*, then bring the Steeples of *Ordforne* North Northwest, *Ordforne*, or Northwest and by North, or Northwest from you, and Sail in so right with them, untill that the Wood or Trees standing upon the next Point to the Southwards of *Balsy-cliff*, come to *Balsy-cliff*, which shall then stand about West Southwest from you, keep the foresaid Wood to the South side of the said *Cliff*, and Sail in boldly right with it, and then you shall run right in the fair way in betwixt the *Whiting*, and the Tail of *Court sand*; but if you bring the foresaid Trees more than a Hand-spikes length without the *Cliff*, you shall not fail to run on against the Point

For to run into the Eastward of the Whiting.

The East side of England,

Point of the Court. The foresaid Wood of Trees is very easie to be known, thereabouts stand no other Trees.

Or bring the Steeple of *Balsy* West Southwest from you, and Sail in so right with it until you come by *Whiting-sand* in 5 or 6 Fathom, and Lead it in so by it upon the Lead, until you come by *Balsy*, or you get deeper water.

When you come near *Balsy*, whether you be come in from the Northwards or the Southwards of *Whiting-sand*, you must keep somewhat off from the shore, because of a little Riff shooting off from the shore, thwart of *Balsy-cliff*, which you must avoid somewhat with Ships of great draught; there remaineth at low water no more then 2 Fathom, you may commonly perceive it well by the rippling of the Tide.

*For to Sail
in at a
channel
through the
Court.*

You may also Sail into the Southwards of the *Rib*, being the Tail of the *Court* or *Court-sand*, thus: Bring the Steeple of *Balsy* North Northwest, or a little more Northerly from you, and Sail in so right with it, and so you shall run into the Northwards through the *Court*, at a Channel of 8 Fathom depth, the East side of this Channel is steep, come no nearer than 8 Fathom, but by the West side you may run in about by the *Court*, upon the Lead, until you come within the Sands.

Balsy,

Balsy hath a high flat Steeple, and lyeth somewhat within the Land behind the *Cliff*. As you come from the Northwards, you may see *Balsy* to the Northwards or the Westwards of the *Cliff*, but men Sail it altogether behind the *Cliff*, so that at last it cometh out again to the Southwards of it.

*For to Sail
into Har-
wich,*

If you will Sail to *Harwich* being past *Balsy*, then bring *Balsy* that the steep Point to the Southwards of *Balsy* where Trees stand upon; keep these Marks so standing, and run so along by the shore, until you be over the Point of the *Chindle*, the Marks thereof are 2 high Trees within the Land, as they are about North Northwest from you, so come they one in the other with the Steeple of *Harwich*, and so you are right over the Point of the *Chindle*, and then you shall get deeper water, (*wiz.*) 4 or 5 Fathom, on somewhat more against the highest water. Run in then about by the Point, the Channel is lying in right North, but in the midst of the Havens Mouth lyeth a sunken Rocky and Stony ground, which you must avoid; you

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may Sail in about it on both sides by the Shore or the other, but along by the East shore is the best, being within it, you cannot Sail amiss or take hurt, if you do not Sail bluntly against the shore; there you may Ankor all over before the Town in 4, 5, 6, or 7 Fathom. You may well also go further in the Bight, there it is clean every where. The fair way betwixt *Ordforne*, or *Whiting-sand*, and the *Naes* lyeth most Southwest and by South, and is 7 Fathom deep, in turning to windwards, you may may run to the shoar in 4, 5, 6, 7, and 8 Fathom, but close to the Sands it is deeper, (*viz.*) 8, 9, and 10 Fathom, the nearer the Sands the deeper water.

But for to Sail from *Balsy* to the *Naes*, you must mark the *Steeple of Balsy*, when it cometh within a Capstan-barrs length near to the South end of the *Cliff*, then keep them so standing, so long until the House upon the *Naes* come over the two Fields lying on against the high Land, or come over *Black-head* on the Sea side. Sail so right in with them, until the Steeple of *Harwich* come to be North Northwest from you in the little Valley of a red Cliff, leave then the first Marks, keep the Steeple of *Harwich* in the little Valley, and go on South Southeast until the third Point of the *Naes* come without the other 2 Points, so shall you run through betwixt the *Naes* and the *Court*, there is at low water no more then 8, 10, or 12 Foot water; it is not good to run through none, unless it be a quarter Flood, or with a Ship of great draught at half Flood. The Point of the *Naes* is very stony, foul, and uneven, the nearer the shore thwart of the Point the shoaldier, and the nearer the Sands the deeper.

When the third Point of the *Naes* cometh without the two other Points of the other Land, and that again it doth begin to deepen off, (*viz.*) 4 or 5 Fathom, so go Southwest, or South and by South unto the Buoy upon the *Longsand*. Thwart of the *Naes* is *Longsand* very steep, so that it cannot well be sounded with the Lead by them which are not there very well acquainted, but somewhat more Southwards you may run along by it in 4 Fathom, and 3 Fathom and $\frac{1}{2}$, until you get the Buoy upon *Longsand* in sight of you. The North shore to the Southwards of the *Naes* is also flat; you may run along by it also upon the Lead.

The

The East side of England,

*Buoys up-
on Long-
sand and
the Spits.*

The Spits.

The Buoy upon *Longsand* lyeth in 2 Fathom and a half at half Flood; you must leave it on the Larboard side, and the Buoy upon the *Spits* on the Starboard side, which lyeth a little shoalder, they lie about South and by East, and North and by West a Musquet shot one from the other; the Course between the 2 Buoys is South Southeast, and North Northwest, but you must reckon well your tides, whether you run through there with a Flood, or with an Ebb. Upon the *Spits* betwixt the 2 Buoys it is at half Flood at least 3 Fathom, or almost 4 Fathom, in the right Channel a little to the Southwards of the Buoy upon the *Spits* stand 2 Masts above water of a lost Ship; which are good Marks. Being over the *Spits* the Course to *Witaker's* Beacon is South Southwest.

*Middle-
plate.*

About half way betwixt them stand also 2 Masts more on the same West side, and over against these Masts lyeth a middle Plate whereupon is a Buoy on the West side: the fair way is along to the Westwards of this middle Plate, through betwixt the Buoy and the Masts.

*Kings-
Deep.*

To the Northwards of the Middle Plate goeth out a Channel by the South side of *Longsand*, which you may Sail out and in, and is called the *Kings-deep*. If you come from *Witaker's* Beacon past the Middle Plate, so far as you get sight of the Buoys of *Longsand* or *Spits*, go so boldly East North East, and Northeast and by East in the Sea, or upon the Lead, along by the *Longsand*; but if you should run into the Sea to the Southwards of the Middle Plate, you should with an East Northeast way fall within the Hook of the *Moufe*. This *Kings-deep* is a ready Channel, and used almost by all Ships to run out at.

*For to Sail
into the
Kings-
deep.*

For to run in at this Channel out of the Sea, then bring the Point of the *Naes* Northwest from you, and Sail in so with it, until you come near the *Gun-fleet* or *Longsand* in 5 Fathom, go in along by it about West Southwest, and Southwest and by West, and keep the sounding of *Longsand*, and so you shall not fail to run in sight of the Buoy upon the *Spits*, and the foresaid Masts to the Southward of it.

*Witaker's
Beacon.*

From *Witaker's* Beacon to *Shoe* Beacon the course is South Southwest somewhat Westerly, coming thwart of the *Shoe* Beacon,

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Beacon, then is the East Point of *Sheppy* about South from you. From *Shoe Beacon* the Course is along Southwest to the Point of *Black-tail*, there runneth off a Hook which men might Sail within, coming from the Northwards; but if you keep from the shore in 7 Fathom, you cannot take hurt of it, but in 5 you run within it. The like Hook is also a little to the Southwards of *Shoe Beacon*, which you might unawares Sail within coming *Shoebeacon* from the Southwards.

From *Black-tail* to the Beacon upon the *Nore*, the course is *Blacktail*. West Southwest. The *Nore* is a Sand lying from the South *The Nore*. Point of the Main Land of the River ~~far~~ to the Eastwards, therefore leave the Beacon on the Larboard side, and go on West along amidst the Channel into the River betwixt both the Lands, as here before hath been said in the Description of the *Fishers-deep*.

From *Aleborough* along by *Dunwich* to *Covehit*, the Last lyeth North and by East somewhat Easterly, and South and by West or somewhat Westerly 5 Leagues: but from *Covehit* to *Leystaff* North and South 2 Leagues. *Aleborough*, *Dunwich*, and the Sands lie thereabouts.

Betwixt *Dunwich* and *Covehit* lyeth the Haven of *Sowle*, *Sowle*. which is a little shoaly River, a little within it divideth it self into *Dunwich*. three parts; upon the Northermost arm lyeth *Sowle*, upon the middlemost *Walderswicke*, and upon the Southermost *Dunwich*.

Covehit hath a high sharp Steeple, thwart of it lyeth a Bank *Covehit*. not far from Land, which falleth almost drie at low water; but at half Flood you may Sail through betwixt it and the Land in 3 Fathom, upon the outer side it is very steep, so that you cannot come nearer it than 9 or 10 Fathom. When the Steeple of *Easton* is West Northwest from you, then you are to the Southwards of the Bank, and when the Steeple of *Covehit* is Southwest and by West from you, then are you to the Northwards of it.

Two Leagues to the Northwards of *Covehit* lyeth *Leystaff*, *Leystaff*. and 2 Leagues more to the Northwards of it lyeth *Yarmouth*. The Steeple of *Leystaff* is high and sharp, and is standing a Musquet shot within the Land from the Houses, so that in Sailing along

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along you may bring the Steeple on both sides of the Houses. Off from *Leystaff* begin the Bank or *Holmes* of *Yarmouth*, and lyeth along to the Northwards past *Yarmouth*, until thwart of *Winterton*, there go divers Channels through them, which you may Sail through upon divers Marks, for those which are there acquainted, may Sail through within these Banks off from *Leystaff*, until past *Winterton*.

For to come
within the
Banks of
Yarmouth

If you will run through from before *Leystaff* within these Banks, then look out for the Fire-beacons which is standing by *Leystaff*, which are two little white Houses, the one standeth beneath upon the Chandle on the Sea side, and the innermost upon a little Hammock, somewhat further within the Land. When you come from the Southwards, they shew themselves to the Northwards of the Town, but come at last thwart of it. In the Night there is always Fire upon them. For to Sail in there also by Night, bring these Fire-beacons Northwest and by North, or somewhat more Northerly from you, and Sail in so right with them either by Night or by Day; the Church of *Leystaff* cometh then to the Southwards of the Town over a Country-house by the water side when you come against the Channel, there is at low water no more than 3 Fathom, keep these foresaid Fire-beacons one in the other, or bring the innermost rather a little to the Northwards of the outermost, for to avoid a little Plate, which is lying on the South side of the *Deep*, but the Channel is indifferent wide, run until you come against the Strand in 2 Fathom and a half, or 2 Fathom, so near as you will or can, and go up Northwards along by the shore, you shall, being Sailed a little to the Northwards, meet with a Flat, whereupon remaineth at low water less than 2 Fathom, with laden Ships you must Anker before that Flat, and stay for high water; it floweth there about 8 Foot up and down; so soon as you are over the Flat it will be 6 and 7 Fathom deep. edge then to the shore, and Sail towards it, and then you come before the Brew-house, there is the Road where you may Anker in 5 or 6 Fathom, from thence Northwards towards toward *Yarmouth* along the shore is all over good Ankering and good ground.

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About an English Mile, or somewhat more, to the South-^{Haven of}wards of the Town of *Yarmouth* is the Haven of *Yarmouth*, it hath 2 Wooden Heads, where you must Sail in betwixt them both against the highest water when the strongest of the Flood is spent; at half Flood it is dangerous because of the strong Tide, which should lightly carry you into the *Bight* against the shore, (against your will,) it is also best to run in along by the Southern Head, there is the deepest. At *Yarmouth* in the Road men do commonly Ankor to the Northwards of the Haven right ^{Road be-}thwart of the Town in 5, 6, 7, or 8 Fathom; the nearer Men ^{fore Yar-}Ankor to the Sands the deeper water you shall have; all good Sand, and soft ground.

If you will Sail into the Road of *Yarmouth* through the *Holmes*, then bring the sharp little Steeple standing to the Northwards of *Yarmouth* within the Land over the broad Castle, or bring the Mill to the North side of the Town; keep these Marks so standing, and go in so West North west; you shall find in the Channel no less water than 8 or 9 Fathom at half Flood, the Channel is called *Sr. Nicholas Channel*, on the North side it is *S. Nicholas* deepest, being come in, the Road is right before the Town in ^{Channel.} 5 or 6 Fathom.

Thwart of over against the Haven of *Yarmouth* goeth also a Channel through the *Holmes*, for to Sail in through there coming from the Southwards, then bring *Sowton* over the North side of the Haven, the great Tree betwixt *Northon* and that little flat House or Castle, and Sail right in with them, and keep these Marks so standing, until you be within the *Holmes*, within them lyeth a Plate on the Starboard side to the Northwards of the Haven called *Middleground*, you may Sail about it on both sides, on the inner side in 5 Fathom. but towards the *Holmes*, or to the Eastward of it in 8 or 9 Fathom.

From *Yarmouth* to *Winterton* the Coast is North and by West ^{Winterton.} and Northwest 2 Leagues. If you will Sail from *Yarmouth* forth through within the Banks to the Northwards, Sail along by the Land, and keep the sounding of the shoar in 5, 6, or 7 Fathom, until you have the 2 Fire-beacons standing to the Northwards of *Castor* one in the other, Sail also right with them either by Day or by Night, by Night there is Fire upon them;

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you shall so run over a Flat through betwixt 2 Buoys, lying each of them upon a Tail of a Sand; Sail boldly in with the foresaid Fire-beacons, untill you come again near the shore in 5 or 6 Fathom, being by the shore, run again along by it, and keep the sounding thereof as before all along, until you come before *Winterton*.

Thwart of *Winterton* runneth off a dangerous Riff, which is dangerous to Sail by about by Night, if Men do come too near it, which is upon the end so steep, that in 3 Fathom you shall not be a Ships length off from it; but as you come from the Southwards, keep your self in 6 or 7 Fathom, so you cannot Sail too near it. To the Southwards of that Riff upon the Land standeth a Fire-tower, which is very easie to be known, with a Fire-beacon, and also a little white House; when these come one in the other, then you are thwart of the Point of the Riff.

To the Northwards of the Riff upon the Land stand 2 white Fire-beacons, whereupon there is Fire by Night, for to avoid this Riff. As you come thwart of the Point, then are these also one in the other, and so serve these for thwart Marks, and the other to Southwards for long Marks, for those which will Sail about it from the Southwards. Coming from the Northwards along the shore in 5 or 6 Fathom, untill you are by the Fire-beacons upon the North side, you must keep somewhat off from the shore before they come one in the other, else you run against the Riff. Being one in the other, they stand Southwest and by West from you, and as the high Fire-beacon to Southwards of *Winterton* cometh to be Southwest, or more Westerly from you, then you are thwart of the Point of the Riff; you may not run so far about within the Riff, for then you should lightly be foul of the Grounds to the Eastwards of it, especially as you come from the Northwards, for there it is not very wide betwixt them both. From *Winterton* to *Haesbrough-Point*, the Course is Northwest 3 Leagues. Betwixt *Haesbrough* and *Admirals house* stands a Ruinous Tower upon the Strand, when you keep it and the Steeple of *Haesbrough* one in the other coming from Northwards, so run you upon the Point of the foresaid Riff. Four Miles without the Land in *Winterton* Sand, the South end whereof is about East, and the North end North-east of *Winterton*.

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Thwart of *Admirals house* not far off the shore is a little Plate where no Ships can go over, but if you go in 6 or 7 Fathom, you cannot Sail too near it, you can also run through in 2 Fathom betwixt this Plate and the Land.

From *Haesbrough* to *Cromer* the Coast is along Northwest and by West, and West Northwest 3 or 4 Leagues. The Land lyeth from *Cromer* to *Bornum* first West Northwest, and West and by North, and then West, and West and by South 9 or 10 Leagues.

From *Cromer* to *Blakeney* it is 3 Leagues. At *Blakeney* *Blakeney* standeth a high Steeple, which you may see along far over the Land, when it cometh to the little Steeple, so have you the first Buoy of the Channel, lying at the South end of the Pole, being a Sand at the West side of the Channel of *Blakeney*, go from the first Buoy to the other, and along by them, until you come within the Haven. This is a Tide-Haven, where Men lie dry at low water. Four Leagues to the Westwards of *Blakeney* lyeth *Wells*, betwixt them both lyeth the foresaid Shoald, called the *Poll* and *Piper*, there it is a Shoald far off at Sea. By the West end of this Shoald goeth in the Deep of *Wells*, the Beacons which you must Sail in along by, stand all along by the *Piper*. When *Habrom* stands East Southeast from you, then you are to the Westwards of the *Piper*; thwart of it is good Road in 6 Fathom. *Wells* is then Southeast from you, and the Trees stand then also *Wells* against the Steeple, then you may Sail open into the Haven of *Wells* along by the foresaid Beacons.

Betwixt *Wells* & *Bornum* is a Bank, you may ride under it in 5 *Bornum*. or 6 Fathom at half flood there is upon it no more than 2 fathom.

He that will Sail into *Bornum*, must go in at high water, and bring the Steeple against the *Black house*, and Sail in so by the Beacons, and leave them on the Larboard side; these are all Tide-Havens.

From *Bornum* to *Chappel* the Course is West South west two *Chappel*. Leagues, to the Northwards of it lyeth the *Sonk*, which is a Sand falling dry at low Tide. You may Sail about it on both sides of the *Sonk* unto *Lin*.

For to Sail in the Eastern Channel of *Lin*, Sail about to *Eastern* the Eastwards of the *Sonk*, bringing the Wood of Trees over the *channel* of Point *Lin*.

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Point of *Sutsein* or *Suidson* Chappel East from you; go so in Southeast and by South, and then you shall find the first Buoy, then South and by West, and South Southwest untill you come about the Point, there the Buoys and Beacons shall shew you the way.

Coming about the Point, then you run through the Sands in the Northern Channel, and Sail out again by the same in the Sea, by the Buoys and Marks being thereof. This Northern Channel lyeth in the Sea Northeast and Northeast and by East, and is very well Buoy'd and Beacon'd.

You may also Sail into the Westwards of the *Sonk*, (*viz.*) South and by East in along by it, and run to the first Buoy, and then from the Buoy along by the Beacons unto *Lin*. Coming from the Eastwards, Men may well run through within *Sonk*, along by the Land, close along by the Chappel, and in South and West unto the foresaid first Buoy before the Town.

*Bostons-
Deep.*

The Flats.

For to Sail from *Cromer* or *Blakeney* to *Bostons Deep*, you must go on West and by North, untill you come by the Land betwixt *Hommer* and *Lagerness*. From *Sonk* lyeth a long Bank called the *Flats*, North in the Sea a League, which at low water falleth dry at divers places. You run with a foresaid West and by North Course (being by *Cromer* or *Blakeney* a little without the Land) along without, or to the Northwards of this Bank, at high water you may well go over it, the Ground on the East side goeth up flat and plain, run boldly to it without fear, untill you come in 4 or 3 Fathom water, he which useth his Lead can take no hurt of it, but on the inner side, that is, on the West side it is very steep, so soon as you be over the shoaldest, you shall get suddainly deeper water, and good Sand Ground, under it, or within it, it is good riding for Easterly winds.

*For to Sail
into Bost-
ons-Deep.
Elleknock.*

For to Sail in *Bostons Deep* through within the *Knock* or *Elleknock*, you must keep the Sounding of the shore in 5 Fathoms, so long untill the Point of *Lagerness* be West Northwest from you. Betwixt the shore and *Elleknock* remaineth at low water 5 Fathom in the midst of the Channel, but *Elleknock* falleth dry at low water. When *Lagerness* is West Northwest from you, so go on Southeast through betwixt *Elleknock* and the

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the shoald, shooting off from the shore to the Westwards of *Lagerness*, untill you get again the depth of 6 or 7 Fathom, in this going over remaineth by low water no more than 2 Fathom, but it floweth there 3 Fathom up and down. Being over it, go on Southwest along betwixt *Longsand* and the shoald, lying off from the shore, there it is deep betwixt them both 9 or 10 Fathom; you must sound both sides in 5 Fathom, but the Flat is somewhat deeper then *Longsand*.

For to Sail without *Elleknock* into *Bostons deep*, coming as afore said to the West Land, you must look out for the 2 Steeples of *Ingoldmills*, standing to the Northwards of *Lagerness*, bring them one in the other, and then they shall stand North Northwest from you, keep them one in the other, and go on South Southeast untill the Trees upon the Point by West of *Lagerness*, come without the Point of *Lagerness*, and then you run through betwixt *Elleknock* and *Dogshhead*, that is a Shoald without *Elleknock*, when the afore said Trees come a Hand-spikes length past, or to the East of the Point of *Lagerness*, then go on Southwest, and then you run right in the Deep, betwixt *Elleknock* and *Longsand*, and so you shall find betwixt *Elleknock*, and the Point of *Longsand* 5 Fathom depth, being past *Elleknock* it will be 8, 9, and 10 Fathom deep.

If you will Sail out of the Sea into *Bostons deep*, and not along by the Land as is afore said, bring the foresaid Trees a Hand-spikes length without the Point of *Lagerness* standing from you about West Southwest, Sail so right in with them, untill that the High Land within *Lagerness*, or *Winfleet* begin to come even with the Point of *Lagerness*, being so from you more Northerly as West, then you are within the Point of *Longsand*. Or else there stand 3 little Houses on the Sea side, about half way betwixt *Lagerness* and *Ingoldmills*, then they come Northwest from you, and the foresaid Trees without the Point, so are you also within the Point of *Longsand*, and go in Southwest betwixt *Elleknock* and *Longsand*. A little past *Lagerness* is lying a Shoald in the midst of the fair way, but nearest *Longsand*; when the Trees upon the Point to the Southwards of *Winfleet* come in the second Valley of the High Land within *Winfleet*, then are you right thwart of this Shoald, edge therefore

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fore to one side or other, rather towards the Shoald, there is widest, keep boldly the founding of the Shoald and run Southwest along by it, until the Steeple of *Boston* come over the Steeple of *Butterwike*, that is also a flat Steeple, but smaller than that of *Boston*, and standing in a Wood of Trees, thwart of it runneth the Shoald off with a Point; being past, go on West Southwest all along by the foresaid Shoald, until the great Steeple of *Boston* come over the second Mill; there is good Ankering by the West shore in 5 Fathom at low water. He that cometh there at low Tide, must Ankor for the Tide until half Flood, before it you cannot Sail further in from thence, and then you find not also more than 2 Fathom upon the shoaldiest.

From thence the Deep lyeth in along by the Beacons, about South to the third Beacon, being past them West Southwest, and then by little and little more Westerly and Northerly, but run all along by the Beacons, leaving them on the Starboard side, at last on North into the River.

Upon the Point of the River standeth a House, being a Sheep-House before that you come by it, it sheweth as if there were no opening, by reason it is all even Green Land, run so by it all along by the Land; being past it, the River doth open it self. Being come within the Points, you must run in betwixt 2 Dikes, a League up until you come before the Town; in the River it is at half Flood every where deep enough. When you come a little within the Houses of the Town on the Larboard side, you must let fall the Ankor, and stay till the water begin to fall, so you have Flood enough for to drive to the Key, there you may fasten with one Cable; it doth not begin to ebb there before the water be fallen 3 Foot.

Boston's-deep.

An East and West Moon maketh in *Boston-deep* the highest water, by before the Town an East and by South, and East Southeast Moon. Coming from *Boston*, and Sailing out at the Deep with a high water, you must look out for the foresaid high Land within *Lagerness*, as it cometh behind the Point of *Lagerness*, so set boldly the Course, where you will be either to the Eastwards or Northwards, without fear.

Lagerness. From *Lagerness* to the *Hommer* it is about 7 Leagues most North; betwixt them both about a League to the Southwards

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wards from the *Hommer* is *Saltfleet-haven*, a little to the North-^{Plate by} ward of a sharp Steeple call'd *Wilgrip*. Thwart of *Saltfleet-*^{Saltfleet-}*haven* an English Mile from the shore is a Sand-plate, not very ^{Haven.} great, falling at low water almost dry; run about without it, and leave it lying towards the Land from you, but yet for need you may also Sail through within it.

For to Sail in the *Hommer* coming from Northwards, Sail ^{For to Sail} along by the shore, and run about by the North Point; come-^{in the} ing by the Point, keep somewhat off from the shore in 4 or 5 ^{Hommer.} Fathom, for to avoid a little Tail lying off the Point, being about it, run to the little Island which lyeth a little by West that foresaid North Point.

If coming from the Southwards, you will Sail to the *Hommer*, then bring the *Pawl-steeple* (being a high and sharp Steeple on the North side of the *Hommer*) a little by South the North Point of the *Hommer*, or over the foresaid little Island, and Sail so right in with it, until you come by the little Island; being come by it, leave it on Starboard side, and run in close by it, for to avoid a great Sand called the *Bull*, which lyeth off from the shore almost into that Island. Coming within the Island, bring the 2 Beacons standing upon the Island, the one in the other, and so Sail on to the Westwards to *Grimsby*, leaving the ^{Road be-} Buoy upon the *Bull*, lying on the Starboard side, and run on so ^{fore Grim-} North by it, you may not come nearer the *Bull* then 6 Fathom, ^{sby.} in this fair way it is 8 Fathom deep. You may Ankor before *Grimsby* in 4 Fathom at low water, and within the foresaid Island by the North Point of the *Hommer* in 3 Fathom; there lyeth commonly Ships tarrying for the Winds, it floweth there at least 3 Fathom up and down; a West Southwest, and East Northeast Moon makes before the *Hommer* highest water.

From *Grimsby* in along to *Hull*, the Course is West North-^{Grimsby.} west to the end of the Bank, or *Ballast plat*, leave them on the North side; on the South side is a little Plate, having a Beacon, leave it on the Larboard, and run along to the North of it; being past it, run along by the shore in 3 Fathom, the fair way there is 4, 5, and 6 Fathom, and thwart of this foresaid Beacon 9 Fathom, coming to the end of the Bank, edge up to the Westwards about by the Point on the South side; but there

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runneth off a Flat which you must avoid, being about this Point, you shall see the Town of *Hull* lying before you, Ankor there before it in 6, 7, and 8 Fathom; an East and West Moon maketh full Sea before *Hull*, for to Ankor by the Ballast-plate, bring the flat Steeple standing to the North of *Hull*, to the high Point of *Pawl*, until you come by the Plate, there it is best to Anker upon it.

Flambrough Head. From the North Point of *Hommer*, called *Spurn-head*, to *Flambrough-head*, the Course is North and by West 9 Leagues, betwixt them it is shoald water of 6, 7, 8 Fathom deep. *Flambrough-head* hath many Chalk Hills, especially on the North side towards *Fily*; *Flambrough* hath a Head or Pear a League to the Westwards of it. On the South side is a Town called *Bridlington* *Bridlington*, having also a Pier; you may Ankor there in the Bay in 6 Fathom.

Fily. Three Leagues by the West of *Flambrough-head* lyeth *Fily* in a round Bay, by South of a Point lying out, and having a Pier, there you may lie within it; but it falleth dry at low water.

Fily-bridge Without the Head of *Fily*, is a Rock under water call'd *Fily-Bridge*, betwixt it and the Pier; you may well lie a float with a Ship of an Hundred Last in 5 Fathom at low water, and have shelter for a Northeast and East wind.

Scarborough From the Point of *Fily* to *Scarborough*, it is Northwest 2 Leagues; *Scarborough* hath 2 Pears; you may run within them at high water, from the Southwards at low water it is drie.

Robin Hoods Bay. From *Scarborough* the Coast lyeth along by *Robin Hoods-bay*, until before *Whisby* most Northwest, but past *Whisby* the Land runneth in West Northwest, and by little and little more West-erly to *Teas*.

Robin Hoods-bay is a good Road for a South Southwest and West wind; you may lie there in 7 or 8 Fathom.

Whisby. *Whisby* is a Tide-Haven falling dry at low water; the East side of the Haven runneth off a Riff of Rocks which you must avoid, for to Sail in, run betwixt the 2 Beacons, until you come in betwixt 2 Lands, and Ankor there.

Hunly Foot.

From *Whisby* to the *Teas*, the Coast is most West Northwest, and

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and West and by North 7 Leagues; betwixt both lyeth *Huntly-Foot*, and *Bedcliff*; *Huntly-Foot* is a high Hill lying on the Sea side, 4 Leagues to the Eastwards of the *Teas*, *Bedcliff* is half way betwixt *Huntly-Foot* and the *Teas*; it is a Cliff of such very red Earth, that when as the Sun shineth against it, it is like red Cloath: these two are good Marks for to know the Coast by. *Bed-cliff.*

Close by the Southwards of the Mouth of the *Teas* lyeth 3 Biffs, lying a half League East Northeast in the Sea, and are foul and Stony falling dry at low water, upon the North side they are flat, so that you may sound about them in 5, 6, and 7 Fathom; but on the South side are so steep, that coming near them, and sounding in 13 and 14 Fathom, you should be upon them, before you should be able to heave the second time.

A League and a half to the Northwards of the *Teas* is *Hartle-pool* upon a Point lying out as an Island; for to go in there, you must run into a Bight by South of the Town within a Head, until you come against the Town; there you shall be dry at low water.

About half ways betwixt *Hartle-pool* and the *Teas*, runneth off also a Riff of Rocks thwart from the shore a good ways into the Sea; come no nearer it than 5 or 6 Fathom, there standeth a Mill to the Northwards of the Town of *Hartle-pool*, keeping that by West of *Hartle-pool*, observe the Marks following a good way to the Northwards, then you cannot Sail upon the foresaid Riff; but if you bring the foresaid Mill a little by West from the Town, so that you can see through them betwixt the Mill and the Town, so you shall not Sail upon the Riff.

For to Sail from the Northwards into the *Teas*, by the Northwards of *Hartle-pool*; a little Southwards of *Sunderland* up the high Land, a little within the Land lie 2 Hammocks close one to the other, easie to be known, like Womens Breasts, called the *Paps*, keep these 2 Hammocks within the Point of *Hartle-pool*, standing then from you Northwest and by North, Sail so on to the Southwards; and you shall fall before the *Teas*, and shall not come too near the same, that lyeth out before the mouth of the *Teas*, and lies off about half a League into the midst of the Sea. *For to Sail into the*

The East side of England;

On both sides, as well on the North side, as the South side of the *Teas*, stands 2 little Houses, white Houses for Fire-beacons; if you come from the Northwards, and get sight of them, then bring the 2 Southermost ones one in the other, which shall then stand South and by East from you, Sail right in with them, untill the other 2 standing on the North side of the *Teas*, come also one in the other, then leave them on the South side, and Sail in right with them that stand on the North side, and so you shall run in amidst the Channel; there is upon the Barr or shoal-diest at low water no more than 5 Foot, but it floweth there with a common Tide at least 2 Fathom up and down.

The Teas. A Southwest Moon maketh there full Sea; if when you come from the Southwards, and will run into the *Teas*, then bring the innermost of the 2 Fire-beacons standing on the North side, at least a Hand-spikes length, or the length of a Capston-barr to the Northwards of the other, and run so Westwards towards them, until the 2 Fire-beacons on the East side are one in the other, and Sail so right in with them, as hath been said, until that the two foresaid Fire-beacons on the North side come one in the other; when you have them one in the other, run in right within them, until you are come by the North shore, and then close along by it, coming also at the desired place, you can Ankor as you please.

When you come so far in past the first Fire-beacon, (*viz.*) that you can see *Hartle-pool* betwixt the 2 Fire-beacons, there you may Ankor in 3, 4, or 5 Fathom; or when *Hartle-pool* cometh betwixt the foresaid Fire-beacons, then go South South-west until you come by the South shore; there it is also good Ankoring. Further it is Pilots water unto *Stokton*, for there within the Deeps do shift oftentimes, and that in short time, 3, 4, or 5 times in a Summer.

For to Sail into the view channel. He that will Sail in there with Northerly Winds, and a Flood, must reckon well the Tides, for the Flood falleth strong to the Southwards over the Grounds, and should be there lightly carryed behind the Bank to the Southwards of the Buoy, lying upon the Point of the Bank.

Besides the foresaid Channel, runneth yet another Channel through the Grounds, lying off from the North Point of the

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Teas. For to Sail in, you must take mark of the 2 high Lands within the Land to the Southwards of the *Teas*, bring them within a Hand-spikes length one to the other, or bring the *Paps* to the West side of *Hartle-pool*, so shall the foresaid 2 high Lands come within a Hand-spikes length near one to the other, Sail in right with them, and you shall run right into the new Channel, along through that foresaid Sand, and come against the Buoy (upon the Sands on the South side of the Deep) again in the right fair way. As you get again deeper water; or have the 2 Fire-beacons on the North side one in the other, then go in towards them 7 Leagues by North. The *Teas* is the River of *Sunderland*, a little the Northwards are the *Paps*, and are good Marks, as hath been before said. The *Paps* being South South-west from you, about an English Mile from the Land, then are you right before the River of *Sunderland*, the Ground is there indifferent clean, but somewhat Stony; there you may Ankor in 4, 5, or 6 Fathom; on both sides of the River it is stonie. On the North Point of the River is a Beacon in the water, run there in within a little Ships length along by it; being past that, you shall get deeper water, (*viz.*) 1 Fathom and $\frac{1}{2}$, and 2 Fathom at low water; but upon the Bar is no more than 3 Foot, with a common Spring and high water, there is 2 Fathom and a half, or a little more.

After this aforesaid Depth of 2 Fathom and $\frac{1}{2}$, or 2 Fathom, you meet with a stonie Floor 2 Ships length broad, upon it, it is at high Tide 12 Foot deep, according as the Tide shall run being over. A little past, there is a narrow place, where a long Ship shall scarce be able to swim within it, it is wide enough, and good Ankor-ground every where.

From the *Teas* to *Tinmouth*, the Course is North North-west 8 or 9 Leagues. Two Leagues to the Southwards of *Tinmouth* is the Point of *Sunderland*, but close to the Southwards of *Tinmouth* goeth in the River of *Newcastle*. From the Point of *Tinmouth* shooteth off a ledge of Rocks, you must Sail in by it, leaving it on the Starboard side. The marks to Sail into this River, are 2 Fire-beacons standing upon the North shore, bring them one in the other, or the innermost, that is the highest a little to the Northwards of the outermost or longest; Sail so right in along

The East side of England,

along by the foresaid ledge of Rocks on the North side, so you shall have upon the shoaldest 2 Fathom at half Flood. A Southwest Moon maketh there full Sea. The South shore is flat, you may lead it in with a Sounding-poll for Ships going not deep, in 10 Foot at half Flood. Coming within, run along by the North shore until past the little Town *Sheals*, edge then over to the other shore, until you come through the crooked Reach, the River is there up again 2 little to the Northwards, and then to the Southwards to *Hawks-bill*, and about by it to the Town of *Newcastle*.

Seven or eight Leagues by North *Tinmouth* is *Cock-Island*; betwixt them both half ways lyeth the River *Bly*, where the *French-men* do much Sail to fetch Coal. From the North Point of this River runneth off a ledge of Rocks a great shot of a cast Piece Southeast into the Sea, but the South side, and the Coast by South of it is very clean and Sand Strand. Upon the South Point of it are 2 Beacons. If you will Sail in there, bring the one in the other, and Sail in right with them, then you can take no hurt of the foresaid Riff of the North Point. Coming by the outermost of them, you shall see then another smaller Beacon by it, standing upon a little edge of Rocks shooting off the South Point, leave it on the Larboard side, and run in along close about Northwards of it. The ledge of Rocks on the North side, remaineth at high water a good ways from the Land, also at a Spring-Tide above water; within it is a Bight, for a North or Northeast wind it is good lying there; at low water there is 2 Fathom deep. In the mouth of the River it is with an ordinary Tide, and high water 2 Fathom, and it floweth there 2 Fathom up and down, so that at low water it falleth almost drie.

Cock-Island.

The *Cock-Island* is a little Island, and not high, it is half a League from Land, you may come to Ankor in it for East, and South, and Southeast winds, but the wind coming Northwards of the East, it maketh there a bad Road, for you must lie betwixt the Island and the Main-Land, where you have no shelter for a North-wind. On the South side of the Island the Ground is foul, and a little to the Southwards of the Island runneth off a foul ledge of Rocks from the shore, until thwart or past the Island.

Island. Coming from the Southwards, keep the Castle of *Bambrough* without the Island, or else you should Sail upon the Point of that Ledge aforesaid.

Betwixt that Ledge and the Island it is so narrow, that a Man standing at low water Mark upon the Rocks of this ledge, should almost be able to cast with a Stone unto the Island. For to Sail in three, take heed unto these Marks hereafter described: there standeth a House upon the Sea side, being a Salt Kettle, and also a Castle somewhat further in within the Land, shewing themselves high enough, bring them one in the other, and then they stand somewhat more Northerly than West from you, and run so right in with them, so shall you run in right amidst the Channel betwixt both; being come in, edge up behind the Island, and Anker there in 5 or 6 Fathom. About this Island there run also divers little Rivers into the Land, but they fall most dry at low water.

From the *Cock-Island* to the *Staples*, the Course is North *The Staples* Northwest, and North and by West, 8 or 9 Leagues; the *Staples* are high Islands and Rocks right to the Eastwards of *Bambrough*, lying at least 3 Leagues from the Land Northeast into the Sea; a little to the Northward of them is the *Holy-Island*. By South or West of the *Holy-Island* is a Bay where you may lie Land-lock'd almost for all winds, against the Castle is the best Road; you may also run in from the Southwards, through betwixt the *Staples* and the Main-land. Betwixt the *Staples* and the *Holy-Island* lyeth two sunken Rocks, *Holy-* coming at low water very near, even with the water, the *Island*. Westermost towards the *Holy-Island*, is called the *Conden-Rock*; the Eastermost by the *Staples* is called the *Plough*. For to avoid them, Sailing through betwixt the *Staples* and the *Holy-Island*, whether you come from the Southwards or the Northwards, bring the Steeple of *Tenstebrough* over the Castle of *Bambrough*, and keep them so standing, and run betwixt them both; this Channel lyeth so through Northeast and Southwest. From the outermost end of the *Staples* to *St. Abbens-head*, the Course is Northwest 8 or 9 Leagues.

From *Holy-Island* to *St. Abbens-head* it is North Northwest 7 or 8 Miles. To the Northwards of *St. Abbens-head* Men do run in unto *Leeth* and *Edenbrough* in Scotland. St.

The East side of England,

S. Abbens-head.

St. Abbens-head and the *Island Bas* lie East and West four Leagues asunder. The *Island May* and *St. Abbens-head* Northwest and Southeast 4 great Leagues. *May* and *Bas* lie one from the other Southwest and by West, and Northeast and by East 3 Leagues and $\frac{1}{2}$. *Bas* is a high round Rock, clean round about, which you may sail along by on both sides. Betwixt the Rock and the South shore it is 10 or 12 Fathom deep, but the common fair way is to the Northwards of it. Between *St. Abbens-head* and *Bas*, it is most a clean Coast, but without Ankor Ground. The *Island May* is greater than the *Bas*, and also clean Ground about, except on the East side, there it is foul.

Island May.

Inchkieth.

From *St. Abbens-head* along to the Northwest of *Bas*, the Course is West and by North, and West Northwest 4 Leagues, and from *Bas* to the *Islands Inchkieth* West, and West and by North 5 Leagues. Between *Bas* and *Inchkieth* by the South shore lyeth many Rocks, little Island, and foul Grounds, where at divers places it is good, but not to be used but by them that are well acquainted. *Inchkieth* and *May* lie Southwest and by West, and Northeast and by East 7 great Leagues asunder. On the North Coast of *Inchkieth* is an out-Point called *Kingorness*, before it, and about it lie some little Rocks under water, a little by Eastward of the Eastwards of the Point is Ankor-ground, and good Road for Westerly winds. Betwixt the Point and the *Island May* or the Point of *Fishnes* on the North shore lyeth divers little Havens, whereof some of them do also yield out Coals, but are little used by the *Hollanders*. On both sides of *Inchkieth* it is good for East and West winds.

Kingorness.

Leeth.

From *Inchkieth* to *Leeth* it is Southeast a League. Before *Leeth* about an half English Mile from the shore lyeth a Rock, upon which standeth a Mast, with a Cross or some other thing of Wood upon the top of it for a Beacon. At high water the Sea floweth over it, and at low water you go on foot to it. From the East side of that Rock lyeth off a Riff almost unto *Inchkieth*. You may also run through to the Southwards of *Inchkieth* betwixt the afore said Riff, and the South shore, but it is not very well to be done, but by them which are here exceeding well acquainted. It is altogether there full of Rocks and

To the Island Cocket.

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and foul Grounds. When as you Sail in to the Northwards of *Inchkeith*, you must leave the foresaid Mast on the Larboard side, and run about to the Northwards of it, and then also towards the South shore, and Ankor about half an English League to the Westwards from *Leith*, and also half an English League from the shore in 6, 7, or 8 Fathom deep. *Leith* the Haven of *Edenbrough*, a Tide-Haven, which falleth dry at low water.



Of the Depths and Grounds about these places.

Five Leagues North and by East, and North Northeast from the North *Foreland*, or from *Margate* is a Bank called *Kentish-Knock*, upon it is 3 Fathom water. Being by it you may even see the Land from below.

Five Leagues Northeast from these Banks it is 20 Fathom deep.

Northeast and by North from the North *Foreland* 9 or 10 Leagues, and about East from the *Naze* 8 Leagues into the Sea, lyeth a Bank called *Galloper*, of five or six Fathom depth.

The *West-rocks* is a stonie Ground lying between the *Cowes* and *Long-sand*, whereupon is no more than 2 Fathom water at half Flood.

Without the Sand of *Harwich* 5 Leagues from the *Naze*, it is Twenty Fathom deep: being there, you may see the Land.

Thwart of *Ordfornes* you may see the Land from below, in 22 Fathom. Five or 6 Leagues without *Leystaff* and *Yarmouth* Southeast and East into the Sea, it is 27 and 28 Fathom deep; there you can see the Land.

Four Leagues East and by South from Land, without the *Holmes* of *Yarmouth*, lyeth a Bank, called *New-sand*, and is not deeper than 2 Fathom.

E

East

The East side of England,

East Northeast at least 7 Leagues from Land thwart *Tarmouth* it is 15 Fathom, the Ground red gross Sand with little round Stones, being there, you may even see the Land from below.

Thwart of *Winterton* and *Cromer* 8 Leagues from the Land, it is 8 Fathom deep, and there you can see the Land.

Winterton Sand lyeth 4 Leagues from Land Northeast from *Winterton*.

Northeast, and Northeast and by North from *Cromer* lyeth a Bank, whereupon remaineth at half Flood no more than 4 Fathom, from thence you may see the Land indifferent well.

North and by East from *Blackney* is a Bank, whereupon is at half Flood no more than 5 Fathom, in 18 Fathom, or thereabouts, you can see the Land. From thence to the Point of *Chappel* it is all shoals. About West Northwest, and North and by West from *Winterton* sand lyeth the Bank before *Cromer* 5 Leagues without the Coast. To the Northwards of *Hammer of Hull*, you see the Land in 25 Fathom. *Flambrough*-head men may see in 35 Fathom, and *Scarborough* from below, you may see in 45 Fathom.



The Tides and Streams of these places.

AT the North *Foreland* a North and South Moon maketh there high water. Within the *Thames* a South and by East Moon.

Before the *Thames* at *Harwich* and *Orfordnes*, a South Southeast Moon.

At *Leystaff* and *Tarmouth* a South Southeast Moon; and without the Banks of *Tarmouth*, and before *Cromer* a Southeast Moon maketh full Sea.

Betwixt the Banks of *Harwich* and the *Holmes of Tarmouth* the Flood falleth South, and the Ebb North. Thwart of the Banks of *Winterton* and *Cromer*, the Flood falleth South Southeast, and the Ebb North Northwest.

Before

From Wells and the Island-Cocket.

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Before *Cromer* a Southeast Moon maketh high water. At *Blackney, Wells, Bornum* and *Lin*, an East and West Moon. Before the *Humber* of *Hull* an East Northeast and West Southwest Moon.

From *Blackney* to *Flambrough-head*, the Flood falleth Southeast, and the Ebbe Northwest. At *Flambrough* and *Filey* in the Pier a West Southwest Moon maketh full Sea.

At *Scarborough* and *Robin-hoods-Bay*, a Southwest and Northeast Moon.

In the *Teas* and at *Harsle-pool* also a Southwest and Northeast Moon. Before the River of *Newcastle*, a Southwest and Northeast Moon maketh high water.

Thwart of *Flambrough-head, Scarborough, the Teas*, and also thwart of the River of *Newcastle*, the Flood falleth Southeast, and the Ebb Northwest.

To the Northwards of the *Teas*, the Flood falleth South Southeast along the Land. From the *Teas* to *Scarborough* Southeast and by East.

On these Coasts between *Tinmouth* and *St. Abbens-Head*, a Southwest and Northeast Moon maketh high water.

At *Leith* in the Haven a Southwest and by West Moon maketh full Sea.

The Flood falleth along these Coasts South Southeast, and the Ebb North Northwest.

North Foreland lyeth 51 deg. 28 min.

Orfordnes lyeth 52 deg. 20 min.

Tarmonth lyeth 52 deg. 45 min.

The side of *Humber* and *Hull* 53 deg. 45 min.

Flambrough-head 54 deg. 8 min.

Scarborough 54 deg. 20 min.

Tin-Bay, or the River of *Newcastle* 54 deg. 58. min.

Barwick 55 deg. 49 min.

Leith 56 deg. 3 min.

For to know the Courses and Distances from place to place. See the Pilots Sea-Mirroure, in pag. 19, 20, 21.

How these Lands do shew themselves at Sea.

Flambrough-head.

Fyley.

Scarborough.

Robbinhoods-Bay.



Whitby

Huntley-foot.

Redcliff.



*Thus shews the Land betwixt the Tees and Flambrough-head
when you Sail along by it.*

Huntley-foot.

Redcliff.

Tees.

Hartlepool.



Easington.

Schell.

Sonderland.



*Thus sheweth the Land betwixt Tinmouth and the Hills of Huntley-
foot and Redcliff, to the Southwards of the Tees, when
you Sail along by it.*

Tinmouth.



Cocket.

Thus shews the Land between Tinmouth and Cocket Island.

II. DEMONSTRATION,

In which,

*The East side of Scotland is shewed,
from the Island Cocket to Orca-
ness.*

From *Lieth* to *Queens-ferry* there lie on both sides many *Queens-
Rocks*, some above, and some under water. In the nar- *Ferry.*
row before *Queens-ferry* lyeth a little Island called *Inch-
garve*, which you must run along to the Northwards of;
on the South side it is with a Stone Bank, (where Men may go
over at low water) fast to the main Land, along to the North-
wards of it, it is clean and deep. Within that little Island lie
Caryn, and other places more, where Men do load Coals.

Under the East side of the Point to the Northwards of
Queens-ferry is a good Road in 2, 3, or 4 Fathom, according
as you lie far from the Shore.

A League North from the Island *May* lyeth the Point *Fifsnies.*
Fifsnies, lying from *St. Abbens-head* Northwest and by North 4
great Leagues. From thence to *Dondee* is a good Haven which *Dondee.*
goeth in betwixt two high Lands, being within, Men do Ankor
before the Town. Farther in upon the River lyeth another
Town called *St. Johns*, which you may go up to at high *St. Johns.*
water.

Between the Point of *Fifsnies* and *Dondee* lyeth also the Bay
of *St. Andrews*, there is also good Ankor ground. Four great *St. Andrews*
Leagues North and by East from the Point of *Fifsnies*, and
Northeast from *St. Andrews* lyeth a great Rock called *Inchkap*, *Inchkap.*
which the Sea floweth over at high water, and at low water it
falleth so dry, that the Fisher-men go upon it. Seven

The East side of Scotland,

Monrofs.

Seven Leagues to the Northwards of *Dondee* lyeth *Monrofs*, a good Haven. First, you must Sail in there, amidst the Channel, and edge up to the Northwards, and Ankor before the Town.

Over against *Monrofs* lie three *Hommocks* which shoot out from the other Land; bring the middlemost and the Houses upon the Strand together, then shall you find the middle of the fair way; on both sides of the Havens Mouth lyeth a blind Cliff.

Red-head.

Betwixt *Dondee* and *Monrofs* lyeth an out-Point called *Red-head*, about a great League to the Southwards of *Monrofs*. There standeth a high Tower upon the Land called *Abrot*.

Stone-Bay

From *Monrofs* to *Stone-Bay* or *de Torre*, the Course is Northeast and by North 4 Leagues. This is a deep Bay, and a good Haven for those that are bound to the Southwards, where Men may lie Land-lockt with many Ships.

Aberdeen.

Three Leagues to the Northwards of it lyeth *Aberdeen*: In this Havens Mouth it is 3 Fathom deep, The West Point is somewhat foul, therefore you must run in by the East Land, until you come within the Haven, and Ankor before the Town in 4 or 5 Fathom, Up to the Northwards is *Great Bay*, but is Shoaldy on both sides. There goeth through a little Creek towards old *Aberdeen*, which is an old ruinous Town.

Boeckness.

From *Aberdeen* to *Boeckness* the Course is North Northeast 12 or 13 Leagues: Betwixt them both lyeth a Tide-Haven. *Boeckness* is a high Hill, and lyeth upon the South side of the Point. To the Northwards of *Boeckness* lyeth a Bay as a Haven called *Spy* or *Spilaert*, and right before the Shore lyeth a Sand called *Ruttenbrugh*, which you must take great care thereof as you come from the Northwards. From thence the Land lyeth in West, and West Southwest unto the Haven of *Ross* or *Lunverness*.

Spy.

*Cape
Tarba.*

To the Northwards of *Ross* lyeth an out-Point called *Cape Tarbate*, right in the bottom of the Bay betwixt *Cateness* and *Boeckness*, distant from *Boeckness* about 19 or 20 Leagues. In this Bay are many Havens and Sounds, which are deep enough for to come into with great Ships. It is from thence to *Cateness* 14 Leagues Northeast and by North, *Cateness* lyeth from
Boeckness

From Cocket-Island to Orkaness.

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Boeckeness Northwest, and Northwest and by North 20, 21, or 22 Leagues, From *Boeckeness* unto the outermost *Orkaness* it is North and by West, and North Northwest, 32 or 33 Leagues.

The *Orkanes* are 31 Islands in number, first *Wayets* or *Elhoy*, which lyeth next to *Scotland*, 5 Leagues about the Point. About North Northeast off from the Point of *Cateness* lie two little Islands *Pits* and *Pichlandscare*, there you may run through to the Westwards betwixt *Elhoy* and *Scotland*.

To the Northwards of them lyeth an Island called *Heynda*, with another Island called *Platta*; to the Northwards of *Platta* lyeth *Mayland* or *Panoma*. On the North side of this great Island are all the Havens where the Ships come to.

Upon the East side of this great Island lyeth another Island called *Kabunsa*, to the Northwards of it lyeth another Island at the Northeast Point of the great Island; you may also run through there towards *Papewester*, and leave *Sanda* lying on the Starboard side.

Close to *Papewester* lyeth *Fara*, to the Southwards of it is *Sirza*. To the Eastwards of *Sirza* and *Fara* lie two Islands, in the midst of all these Islands, called *Eeda* and *Chapnoza*.

Sanda lyeth to the Northwards of all these Islands, but *Papa* and *Stronza* lie to the Southwards of *Sanda*.

To the Eastwards of *Stronza* lyeth an Island called *Cuiffella*, that is the Eastermost Island of all, the Northermost is called *Ronalze* or *Northernase*.

Eleven or twelve Leagues Northwest from the great Island lie two Rocks, the one under water, and the other above water; he that cometh from the Westwards must take heed of them.

of



Of the Tides and courses of the Streams.

ON these Coasts betwixt *Tinmouth* and *St. Abbens-head* a Southwest and Northeast Moon maketh high water.

At *Leeth* in the Haven a Southwest and by West Moon maketh full Sea.

The Flood falleth along these Coasts South Southeast, and the Ebb North Northwest.

At *Orkaness* and *Boeckness* a Southwest and Northwest Moon maketh high water.

The Floods come about from behind *Scotland* from the Westwards through betwixt *Fairhil* and *Orkaness*, and make thereabout full Sea with a Southwest and Northeast Moon.

From *Boeckness*, the Flood falleth South along the Coast towards *Leeth*, and the Ebb North to the contrary.

In this fair way it is deep 40, 50, and 60 Fathom, in 45, 50 Fathom, you may see the Land. In this fair way in the Summer the first Herrings are caught.



Heights.

| | |
|--|-------------------|
| <i>St. Abbens-head</i> in <i>Scotland</i> in | 56 degr. 12 min |
| <i>Boeckness</i> lyeth in the height of | 57 degr. 55 min. |
| <i>Cateness</i> in | 58 degr. 40 min. |
| The greatest or the outermost Island of the <i>Orkaness</i> in | 59 deg.
8 min. |

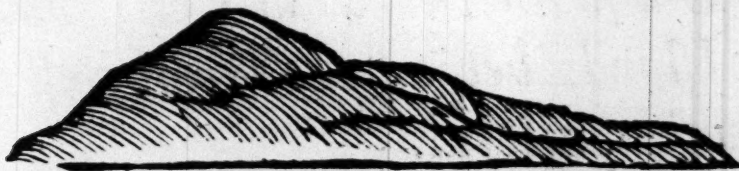
How these Lands do lie one from the other. See the
Pilots Sea-Mirrour, pag. 22, 23.

How

How these Lands do shew themselves at Sea.



Thus sheweth Boeckeness when you Sail along by it.



*In this form sheweth the Land Cateness, when
you Sail along by it.*



*Thus sheweth the Northeast Point of Orkaness, when
you Sail along by it.*



III DEMONSTRATION.

Wherein,

Are set forth the Coasts of Fair-hil, Hitland, and the Islands thereabouts; as also the Islands of Fero, and some Islands behind the Northwest corner of Scotland.

Fair-hill.

THe Island *Fair-hill* lyeth from the East Point of the *Orkanes* Northeast, and from *Boeckeness* North and by West about seven and thirty Leagues.

On the West side of *Fair-hill* is at some places foul Ground, but upon the Southeast side is good Ankor ground, there you may Ankor every where; but there stretcheth a Riff on the East side of the Shoar off Southeast 2 Leagues into the Sea.

Fulo.

Fulo lyeth from *Fair-hill* Northwest and by North 10 Leag. betwixt them both lyeth the Southermost Point of *Hitland*, lying from *Fair-hill* North Northeast 7 or 8 Leagues, and from *Fulo* East and by South 4 Leagues.

The Southwest Coast of *Hitland*, viz. (from the Southermost Point to the Northwest Point) lyeth Northwest and by North 8 or 9 Leagues. On the same Southwest side, over against the Island *Fulo* lyeth a Sand-bay, where Men may Ankor, but on the east side of this Bay it is somewhat foul. From that Northwest or West Point off to the North end, the Land of *Hitland* lyeth Northeast and by North, and Southwest and by South 20 or 21 Leagues.

And some Islands after Scotland.

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Two Leagues to the Northwards of the foresaid West Point lyeth the Haven of *St. Magnus*, which is a broad Sound, with- *S. Magnus* in it is good Ankor Ground in 16 or 17 Fathom depth, according as you shall be far within the Land. On the North side lyeth a high Rock, where you must run in to the Southwards of. And on the South side lyeth 2 or 3 Rocks, which you must leave on the Starboard side, when you Sail in there.

Even to the Eastwards about the South Point of *Hitland* lyeth a fair Sand Bay, where you may Ankor in 12 or 13 Fathom; from thence to *Hanglip*, the Course is Northeast somewhat Easterly 8 or 9 Leagues.

Betwixt *Hanglip* and the South Point lyeth an Island, which *Hanglip* you may Sail about on both sides; within it lyeth *Hambrough* *Hambrough* *haven*, or the *Scottish haven*, which is a lade place for the *Ham-Haven*, *burgers* and *Scots*. This Haven is also called *Bremer haven*. There lyeth also a high Steep Point to the Southwards of *Hanglip*, to the Southwards of it Men do run into *Broad-Sound*, the *Broad-* chiefest Haven of all *Hitland*, which is deep, and hath clean *sound*. Ground; there Men do lie Land-locked for all Winds.

From the *Broad-Sound* lyeth a Sound in along to the Northwards, through the Land, which commeth out again into the Sound to the Northwards, and so maketh an Island of the Land whereupon the high Hill *Hanglip* lyeth. When as you will Sail in there from the Northwards that is to the Northward of *Hanglip*, you must run in nearest by the South Shoar, and edge to it betimes. In this Channel betwixt both Lands lie 2 Islands or Rocks, the greatest lyeth nearest the North Shoar, and the smallest nearest the South Shoar; betwixt them both lyeth also a sunken Rock, which at low water is uncovered, and at high water you may know it by the breaking upon it. When you will Sail in here, you must leave the foresaid greatest Rock, with the sunken Rock, on the Starboard side, and the smallest Rock on the Larboard side; there is upon the shoaldest three Fathom and a half water.

Within this Haven lie also two Havens at the North Point, which lie into the Land, where there is good lying.

The Coasts of Fair-hill, Hitland, Fero,

When as you will Sail from this foresaid Haven through within unto the *Broad sound*, you shall meet, scarce half ways with a Rock, from which lyeth off a Riff towards the West Shoar thwart of it, you must run close along by the West Shoar for to avoid that Riff.

To the Northwards of *Hanglip*, the Land of *Hitland* lyeth North, and North and by East, and North Northeast, at least North, and at some places you may Sail in through *Hitland*, especially to the Northwards of *Walfoen*, where a fair broad Sound lyeth Northwest through; there is good Ankor Ground to find at some places, for those that are there acquainted. From *Hanglip* to the Northeast Point of *Hitland*, the Course is North Northeast 10 Leagues, there lie some out-Rocks called the *Outscars*. *schares*. From thence along to the North Point of *Hitland*, the Course is North about 4 Leagues.

Bloem-sound. A little about the East Point goeth in a fair Haven, called *Bloem-sound*, lying in Southwest. On the West side lyeth a long Rock, you must Sail into the Eastwards of it, and Ankor a little within the Haven, it is there within all clean Sand Ground and good lying; *Bloem-sound* lyeth in first (as hath been said) South Southwest, afterwards South, and South and by East, on both sides is good Ankor Ground, there you may Sail altogether through, and come out again through *Jell-sound* into the Sea, about the Island *Fero*.

Names of the Islands of Fero. The greatest and chiefest Islands of *Fero* are 12 in number, as *Suydro*, *Sando*, *Moggenes*, *Wage*, *Stromo*, *Ostro*, *Calso*, *Cuno*, *Bordo*, *Wydro*, *Swino*, and *Fulo*.

The little Islands of *Fero* are 10, as *Littledimen*, *Stoerdimen*, *Schuyvo*, *Dalsfles*, *Hesden*, *Trallo*, *Colster*, *Moggenholme*, the *Monk*, and the *Bishop*. Besides these, there are yet some Rocks and little Islands, to 7 or 8 in number.

Suidro. The Southermost great Island called *Suidro*, lyeth most Southeast and Northwest about 7 or 8 Leagues. At the Southeast end of this Island lyeth a high Rock, called the *Monk*, or *Samby*, after the name of the first or Southermost Haven in *Suidro*. Betwixt the *Monk* and the Southeast end of the Island *Suidro*, is a Race or Well, which Men must avoid, especially with Spring-Tides.

Upon

Upon the West side of the Island *Suidro* are no Havens for to save any Ships in, but it is altogether high steep Land. On the North side are many Havens, where Men may Sail into and save Ships, as *Sommerfoud* or *Hest*, *Hofwick*, *Ureby*, *Quaelby*, or *Rane*, all broad Sounds or Havens; a Country-man or Pilot can bring you in there every where to your desire.

From the Northwest end of *Suidro* to *Moggenholme*, the *Moggenholme* Westermoft and outermost Island of *Fero*, the Course is North-west and by North, and North Northwest about 8 Leagues.

At the East end of *Moggenholme* lyeth *Moggenes*, to the *Moggenes* Eastwards of it lyeth the Island *Wage*, and to the Eastwards of *Wage*. *Wage* goeth in a fair Sound from the Southwards off from the Island *Sando* about *Hesten* and the Island *Colster*, for you may run in about these Islands on both sides, and leave the great Island *Stromo* on the East side, and so come into *Wage*. In the midst of the Sound of *Wage*, goeth up a Haven to the Eastwards into the great Island *Stromo*, therein you may Ankor in 10 or 12 Fathom, but the Sound is at least 20 Fathom deep,

Moggenes and the Northeast end of *Fero*, lie East Northeast, or a little more Northerly, and West Southwest about 15 Leagues asunder. Betwixt them both lie 10 Islands, and betwixt each Island is a fair broad and deep Sound, whereof the fourth off from *Moggenes* is called *Somfoud*. All these Sounds *Somfoud* lie most North Northwest, and South South Southeast through the Land, and upon all these Islands stand Churches, except upon *Ostra*, which nevertheless is a great Island.

From the Southeast end of *Suidro* to *Scalhead*, or the South-*Scalhead* east end of the Island *Sando*, the Course is North and by West about 5 Leagues. Betwixt *Suidro* and *Sando* lie the little Islands, *Little Dymen*, *Stoer Dymen*, *Schavo*, and *Dasfles*.

From *Scalhead* until within the Island *Musso* (lying before *Little Stromo*) the Course is North and by West 4 Leagues, there *Dymen* you may every where Ankor where you will, in 20, 30, or 40 *Stoer Dymen* Fathom. If any Man coming in out of the Sea, desireth to see a good Road or Haven under the Islands of *Fero*, he shall keep that middlemost great Island *Stromo* Northwest, and Northwest and by West from him; and then he shall see upon the middle of

The Coasts of Fair-hill, Hitland, Fero,

of the Island *Stromo* a high steep Hill called *Schellinck*, which he must Sail right in with, and so he shall meet with that foresaid Island *Mulso*, a low Island, which you may Sail about on both sides, but it is best for to run in there at the South; under this Island is all over good Ankor Ground. Right over against this Island, on the great Island, lyeth *Torshaven*; the chiefest Haven of *Fero*, where all the Trade of Merchandize is.

Torshaven. From *Torshaven* or the Island *Mulso* to the Northeast end of *Fero* the Course is Northeast, and Northeast and by East about 12 or 13 Leagues; betwixt them both lie 7 Islands, and betwixt each Island (as hath been said) goeth a broad Sound through the Land: lying through about Northwest, Northwest and by North, and North Northwest. The North end of *Fero* is about 4 Leagues broad, and lyeth Northwest and Southeast, and is called *tulo*; thwart of it lyeth the *Bishop*.

Fulo.

The Bishop

He that desireth to Sail off from *Mulso* into *Somsound*, let him go on Northeast and by North 3 Leagues unto the Point of *Bordenes*, then up Northwest off from *Bordenes*, and then he shall espie a Church upon the Island *Calso*, which he must leave on the Starboard side, and go in along West Northwest untill he come into the Bight of the Island *Ostro*, and Ankor there in 17 or 18 Fathom.

These Islands of *Fero* lie in a Triangle, it is from the Southeast end of *Suidro* to *Fulo*, or the North end of *Fero* North Northeast, and South Southwest 21 Leagues asunder.

From *Scotland* Westwards, and to the Northwards of *Ireland*, lie many Islands, whereof we shall here describe some, with so much perfection, as thereof is yet known.

*Names of
the Islands*

The names of the principal Islands lying there, are these: *Aren, Ila, Jona, Mulla, Bragedul, Hun, Lewis, S. Patriciu, S. Maria, S. Colane, S. Petow, Eph, and S. Kilda*, these are the greatest. There are yet some small Islands; as *Rona, Ghent, Trauta, Fladde, Grand Melul, Petit Melul, Staipan, Canaa, Rum, Egg, Mule, Cutte, Cardenbrough, Gronsay, S. Karbo, Lismon, Swinoy, Machare, Gegay, Caray, and Navarsay*. All these Islands do lie and belong under *Scotland*, and are those which by the Cosmographers are called *Insulae Hebrides*.

The

The Island *Bar* or *Rona* is the Northermost Island lying be- *Barr or*
hind *Scotland*, and lyeth from *Fulo* about West Southwest 37 *Rona.*
or 38 Leagues; it lyeth by 2 other little Islands about a great
League one from the other.

The Island of *Lewis* lyeth from *Rona* Southwest, distant 16
or 17 Leagues, and from the North end of *Lewis* to *St. Kilda*,
it is Southwest and by West 16 Leagues

On the East side of *St. Kilda* is a good Road for a West and
Northwest wind. This Island lyeth from the other little Island,
whereof the two are not very great, upon that which lyeth to
the Westwards; you may see some Houses stand, and these 2 little
Islands lie 10 Leagues to the Westwards of the great Island of
Lewis. Upon the Coast of *Lewis* lie also two rows of great
Rocks, like as if they were little Islands, lying one from the
other South and North somewhat Easterly about seven or eight
Leagues.

The Southermost lie by 3 little Islands, but the Northermost
lie by 8 small little Islands or Rocks.

The Island of *Lewis* is divided into many parts, the which
Men may Sail through at many and divers places *Lewis*, with
the Islands belonging to it, lie South Southwest, and South
and by West about 29 Leagues.

But on the East side goeth a broad Sound through off 5 or
6 Leagues. Men Sail in close by the Island of *Lewis*, about
South Southwest untill past the Island *Chent*.

From thence the Sound lyeth through betwixt the great Island
Bragadul, and *Lewis* South, and South and by West towards
the West end of *Lewis*, called the *Ephis*; then you must leave
Mulla and *Ila*, with divers many other Islands on the Lar-
board side.

Jona, *Ila*, *Mulla*, and *Bragadul* are 4 of the greatest Islands,
which are lying on the West Coast of *Scotland*, and lie close by
the main Land; but there are many Havens and Sounds, so that
there you may Sail in and about them every where.

At the Northwest Point of *Ireland* lie also some Islands,
which you may Sail through and round about them all.

Betwixt *Rona* and *Orkaness* lie also some Islands, which also
you may Sail through, betwixt, and round about, He

The coasts of Fair-hill, Hitland, Fero,

He that falleth with these Islands must be very careful and circumspect, for the most part of them are Inhabited by wild and Savage People.

In *Lewis*, and the Islands thereabout a Southwest and Northeast Moon maketh the highest water, and likewise also without the North Point of *Scotland*.



Of the Tides and courses of these Streams.

IN *Hitland* within the Havens and Sounds a South Southwest and North Northeast Moon maketh full Sea. The Flood runneth there to the Eastwards, and the Ebb to the Westwards, especially at the South end and North end of *Hitland*, and so fall thwart through the Sounds and Havens.

In the Island of *Fero* a North and South Moon maketh the highest water.

Under the Islands of *Fero* go very hard Tides, with great turnings, the Flood cometh there out of the West, and West Northwest, the Ebb out of the East, and East Southeast, and fall so along through the Islands; there you must reckon your Tides thereafter; when you will Sail from the one Island to the other, there are 2 Wells or Malestreams, the one at the South end of *Suidro*, and the other a League within *Scalhead* at *Quaelness*.

Although the Tides do run so strong through these Islands yet nevertheless it floweth not there 4 Foot up and down.

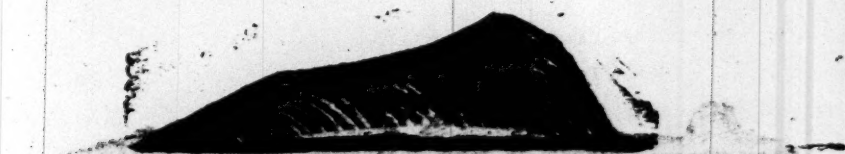
For to know the Courses and Distances from place to place. See the Pilots Sea-Mirroure, in pag. 21, 22, 23.



Of the Latitude of these Lands.

| | |
|--|-----------------|
| T He South end of <i>Hitland</i> lyeth in | 59 deg. 48 min. |
| The North end of <i>Hitland</i> lyeth in | 60 deg. 50 min. |
| The South end of <i>Fero</i> lyeth in | 61 deg. 15 min. |
| The North end in | 62 deg. 20 min. |
| The Islands of <i>Rona</i> lyeth in | 58 deg. 46 min. |
| The North end of <i>Lewis</i> lyeth in | 58 deg. 18 min. |
| The Roek <i>Rokol</i> lyeth in | 58 deg. 20 min. |
| The Northwest Point of <i>Scotland</i> lyeth in | 58 degr. |

How these Lands do shew themselves at Sea.



Fair-hill being 5 Leagues Southwest and by West from you sheweth thus.



When Fulo is Northwest from you so far, that you may even see it out of the top, it sheweth thus.

The coasts of Fair-hill, Hitland, Fero, &c.



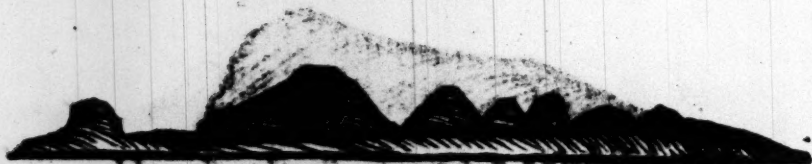
Thus shews the Hanglip when it is Northwest from you 8 Leag.



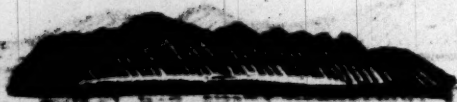
*When as the North end of Hitland is Southeast
and by East from you, then it ariseth thus.*



*When S. Kilduyn is Southwest about 5 Leagues
from you, it sheweth thus.*



*When the Island Lewis lyeth East from you, then it riseth
thus, and then you are without S. Kilda.*



*Thus sheweth the Island Barre or Rona, when it is
4 Leagues South Southeast from you.*



IV DEMONSTRATION.

Which unfoldeth,

The Coast of Flanders, from the Wielings to the Heads about Callice, together with the Coast of England, from Dover to the North Foreland.

B Etwixt *Wenduynen* and *Blanckenbrough* standeth another little Steeple, called *John Davids Steeple*. *Ostend* lyeth a great League to the Westwards of *Wackerhout*. A half League to the Westwards of *Ostend* lyeth *S. Catelyn*, and a League to the Westwards of it is *Middlekerk*, being a high thick flat Steeple. From *Middlekerk* to *Newport* it is 2 Leagues; there is a flat Steeple, with a little sharp Steeple. A little to the Eastwards of *Newport* lyeth our Lady of *Lombardy*, a high flat Steeple.

From *Newport* to *Broers* it is 2 Leagues, and from *Broers* to *Dunkirk* 3 Leagues. The *Southkoten* is a League to the Eastwards of *Dunkirk*. *Dunkirk* hath a high flat Steeple, with a little sharp Steeple. From *Dunkirk* to *Graveling* are 3 Leagues; betwixt them stand these Steeples, first, little *Sinten*, a little sharp Steeple, great *Sinten*, a thick flat Steeple; *Mardike* a thick flat Steeple, and *S. Georges*, a high sharp Steeple; *Graveling* hath no Steeples, but there stand 2 Mills, one on the Eastern-Gate, and the other on the West end of the Town. From *Graveling* to *Callice* are three Leagues. *Callice* hath many sharp Steeples, whereof one is higher than all the rest, and betwixt both lie these Villages, most without Steeples.

The Flemish Coasts,

Steeple. First, *Hoghenprijs* and *Dafen*, two flat Steeples; more *Valdam* a flat Church with a little Spire upon the midst of it, that is all the knowledge of *Flanders*. The Coast of *Flanders* betwixt *Callice* and *Blankenbrough*, is 24 Leagues long, or as some say 21 Leag and *Blankenbrough* from *Flushing* 9 Leagues. So that *Flushing* is from *Callice* at the least 30 Leagues, or as some say 33 Leagues at the most.

That which is here said of the Steeples and Leagues along the Coast of *Flanders*, is very well described and needful, as well for that which is before described of the *Wielings*, as also the Sailing into the Havens of *Flanders*, but especially for the knowledge of the *Flemish Banks*.

Ostend.

For to Sail into *Ostend*, you must run close to the Eastwards of the Town into the Haven, called the *Gueule*, on the East Point of the Haven lyeth a Head, whereupon standeth a Beacon, you must run close in by that Head, there it is deepest; from the West side, viz. towards the Town, shooteth off a little Flat, whereof you must avoid that side a Ships length or two, at low water, and a common tide remaineth in this Havens mouth 6 foot, and at high water there is 22 foot water. A little within the Haven you may Ankor where you will, and at low water you may lie there with a great Ship afloat.

Newport.

Newport is a Tide-haven which falleth altogether dry at low water, and at high water and a common Tide there is 13 Foot water; close before the Havens mouth is a Bank, which lyeth from the Eastwards of the Haven of *Newport* over to the Westwards, thwart before the Havens Mouth, and at half Flood lyeth dry, and at high water there cometh no more upon it than 8 Foot water.

For to sail
into New-
port.

He that will go into *Newport*, must go in from the Westwards betwixt the foresaid Bank and the Land, and Sail unto the Southwards of the Bank so long until that the innermost Beacon come even through, or to the Eastwards of the outermost, and then run in so right by them, and in along amidst the Channel betwixt the Heads. Betwixt the Bank and the Land it is on both sides flat rising Ground, so that you may found the Shores on both sides, but on the North side the Bank is somewhat steep, it is 3 Fathom deep close along by it. Within the Havens mouth

it is set on both sides of the deep with Beacons, where you must run through betwixt, until you come before the Town, which lyeth about a Canon shot from the Sea side. There is Fire in the Night upon the 2 great Beacons out, not longer than from half Flood to half Ebb.

From *Newport* to *Dunkirk* along by the Shore through within the Banks, it is clean without any foul Ground or Banks, and at low water 15 Foot deep, the nearer the shore the deeper. Thwart of the *Cloister Ten-Duynen* betwixt it and the *Broers-bank*, it is narrowest, which lyeth not far from the shore; thwart of it you must go close along by the shore.

The *Quade-bank* runneth off to the Eastwards of the Head *Quade-bank* of *Dunkirk*, at least two Leagues to the Westwards ending thwart of the Heads of *Dunkirk*. To the Eastwards of the Easter Head of *Dunkirk* Men may Ankor behind this Bank, and lie sheltred for a Northwest, North, and Northeast wind, it is two Fathom deep there at low water, but in the coming in, it is shallower. Before the Havens-mouth of *Dunkirk*, it is 9 and 10 Fathom deep, and to the Westwards of the Wester-head of *Dunkirk* 6, 7, and 8 Fathom; from thence Men may run over the small Bank in 3 Fathom, and come against the broad Bank. This small Bank lyeth right thwart before the Haven of *Dunkirk* viz. betwixt *Dunkirk* and the broad Bank.

For to Sail into *Dunkirk*, you must bring the Fires within a Capston Barrs length one to the other, viz. the innermost so much to the Eastwards of the outermost, keep them so, and run in then close along by the Easter-head; the Wester-head lyeth somewhat further off into the Sea than the other; thwart of it lyeth a Sand-plate with some Pales, therefore you must avoid it, and run in close along by the Easter-head it is a narrow Haven, and at high water, and a common Tide, there cometh no more than 12 Foot water. In the Night they do Fire there as at *Newport*; from half Flood to half Ebb, and the lowest Fire-beacon standeth next unto the Sea.

From the Wester-head of *Dunkirk* runneth off a Bank about two Leagues long, called the *Splinter*, which falleth dry at low water at many places, Men may Sail in by the shore, behind this

The Flemish Coasts,

this Bank from the Westwards almost to the Wester-head of *Dunkirk*, and there may come to an Ankor in 5, 6, 7, and 8 Fathom. About half a League from the foresaid Wester-head, there runneth a Slenk through the foresaid Bank, where little Ships may go through at high water.

Graveling *Graveling* is also a Tide-Haven, where Men must go in at high water, there stand two Beacons, which you must keep one by the other, and Sail so in betwixt the Heads; on the West side runneth off a little Riff, which you must avoid. When you come from the Eastwards along the Coast running through *Wolbrek-sound*, at the end of the *Brakes*, (that are the Banks before *Dunkirk*, and from thence Westwards) then you come against the West Point of the foresaid little Riff or out-Sand of *Graveling*, which lyeth a good way off into the Sea; to the Eastwards of it Men run into the Haven of *Graveling* by Night right in with the Fires.

To the Westwards of the Haven of *Graveling* lyeth a Bank or Flat along the shore, lying a good way off from the Land to Sea-wards, almost as far to the Westward as *Callice*, called the *Newland*. *New-Land*; Men may run along by it, or over it in 5, 4, and 3 Fathom, according as Men will.

Callice. The Haven of *Callice* falleth every Tide altogether dry, and at high water with a common Tide, there is no less than three Fathom water. For to Sail in there, you must keep the Mill (standing on the East corner of the Town) right over the Easter-head, and run in so close along by the Easter-head, and let the Castle lie on the West side of you; from the Wester-head runneth off a little Riff, therefore you must avoid it. When you are come in within the Wester-head, you must go up to the Westwards into *Paradise*, and there lie dry at low water. By Night when the Tide serveth, there stand two Fires, you must run in right with them. It is not good to come into this Haven before high water, because of the exceeding strong Tide that runneth in there with the Flood, for to avoid the Ankors of the Ships, which lie there within. It is there within dangerous and bad lying, especially with a Northerly wind, which bloweth there open in.

Thwart off from Wester-head of *Callice* lyeth a Bank of 2 Fathom, betwixt the Head or *Meyland*; and the same Bank Men may run through in 3 Fathom at half Flood, the Bank is two Fathom deep. Under *Callice* Cliff, at the East end, Men *Callice-cliff* may Ankor in 10 Fathom; but at the West end lyeth a Rock under water a Bow shot from the Land. *Callice* Cliff lyeth betwixt *Callice* and *Blankness*.



Of the Flemish Banks.

West from *West-Cappell*, and Northwest from *Ostend*, about 9 Leagues without the Coast of *Flanders*, lyeth a little Plate, whereupon at low water is no more than 22 Foot water, in foul weather the Sea breaketh very much upon it.

About two Leagues from *Ostend* without the Land lyeth the *The Trick*, *Trick*, or Outer-bank, upon it there is no more than 15 or 16 Foot water. When *St. Katherines* Steeple cometh against *Ostend*, then you come on against this Bank: betwixt this Bank and the Heads of *Ostend*, lyeth another Bank of 3 Fathom water.

Betwixt *Ostend* and *Newport* lie 4 Banks, all which 4 begin about thwart of *Ostend*; the 2 nearest to the Lands end thwart of *Newport*. The other lie all along the Land almost to *Dunkirk*: the first and nearest to the Land is called the *Geer*, betwixt that *The Geer* and the Land goeth a Channel through, of 8, 9, and 10 Fathom.

The second called *Laland*, endeth also against *Newport*; *Laland* betwixt these two goeth a Channel through of eight and nine Fathom.

The third are two Banks one from the other, the Eastermost ending half ways: *Laland* is called *Stroom*, the Westermost *Stroom*, ending

The Flemish Coasts,

Stonebank. ending thwart of *Dunkirk*, is called the *Stone-bank*, which hath on the East side a Hook which lyeth to Eastwards, running to nothing almost against *Newport*: this Bank is 3 or 4 Fathom, and upon the East end thereof 5 and 6 Fathom.

Sandels. The fourth is also in 2 Banks, the Eastermost is called *Sandels*, or *Oudemooers Bank*, and the Westermost *Calbank*, of some called also *Small-bank*, which lyeth along by the *Broad-bank*: but that outer end lyeth at least 2 great Leagues off.

The Ships that will go before *Dunkirk*, and cannot get along by *Flaxanders*, do run about without these Banks, until they come against *Broad-bank*, and then run in along by it 5 or 6 Fathom. The Channel is 15 Fathom deep, and every one of these 4 Banks hath a dry *Poelder*. When 2 Steeples (that are somewhat flat to the Southward of *Newport*) stand 2 Handspikes length asunder, then are you thwart of these 4 Banks here before mentioned, which are not deeper at low water than 1 Fathom, and at Spring-Tides fall almost dry.

Betwixt all these Banks you may Ankor in 9, 10, 11, and also in 12 Fathom; you may run over them in 4 Fathom, but when you are to the Westwards of them you shall find it deeper, (*viz.*) 8, 9, and 10 Fathom.

Broers-bank. The *Broers-bank* is 3 cornered, and lyeth close by the Land thwart of *Broers* and the *Cloister Tenduynen*, and lyeth off from the shore about West Northwest a League into the Sea; when the *Cloister Tenduynen*, or the *Broers* lie South from you, then you are at the innermost part of the *Broers-bank*, you may run through betwixt the Land and this Bank, in 4 Fathom at low water; but Men do run commonly about to the Westwards of it, when they Sail through within the Banks along the Coast of *Flanders*.

Camt-bank. A little to the Westwards of *Broers-bank* lyeth the *Camt-bank*, which is 3 Fathom deep, and lyeth in many Races; you may run through betwixt the Land and this Bank also in 8, 9, and 10 Fathom, and also may ride there for all winds. By the Land, betwixt this Bank and *Broers-bank*, it is 5 Fathom deep. When you run through betwixt this Bank and the Land, then you come along by the *Quade-bank*, until you come before

fore the Haven of *Dunkirk*. When you are a good ways past the Head of *Dunkirk*, about Southwest from the *Splinter*, then you run over a Shoald of 2 Fathom called *Wilbaert-sound*, *Wilbaert* being over it, you shall have again then 11 and 12 Fathom. *sound.* When *Borburger Steeple* cometh in the Valley of the Sand-hill, then are you thwart of this Bank; by these Marks you may Sail through these Banks North Northwest into the Sea, and come against the Tail of the Broad-bank in 4 Fathom. When as that you do edge again somewhat towards the Land in 12, 13, or 15 Fathom: then you may Sail through betwixt the Broad and the Small Bank, on East Northeast, or East and by North, until you are past the *Cloister Ten-duynen*, or the *Broers-bank*, which lyeth off from the *Cloister* about a League into the Sea. To the Eastwards past this Bank it beginneth to be shoald water against *Newport* 4 or 5 Fathom; being past *Newport*, you must edge towards the Land in 8 or 9 Fathom, keeping close to the Land, and then you shall run through betwixt the Land and the *Geer*, (which lyeth along towards *Ostend*:) When you come against *Ostend*, then you are clear of the Banks, and then you may run into the Sea for to go into the *Wielings*.

There lie yet 5 long Banks along *Flanders*. When *Gravel-Marks of ing* is Southeast from you, then are you thwart of the South end *the Flemish* of these Banks; and when *Newport* is Southwest from you, *Banks.* then you are thwart of the North end of them, they are very long, and betwixt each goeth a wide Channel through, of 8, 9, 12, 15, 16, 18, 19, and 20 Fathom deep, each of a several high depth.

The outermost or Westermost Bank called the *Cliff*, lyeth *the Cliff.* from *Callice Cliff*, North Northeast about 4 Leagues and an half, and is 3 Fathom and an half deep: betwixt this and the other goeth a wide Channel through, of 23 and 24 Fathom deep.

The second called the *Ruyting*, lyeth from *Callice Cliff* Northeast and by North about 4 Leagues, and is there 5 or 6 *The Ruyting* Fathom deep; but upon the South end of it is a *Poelder* of 2 Fathom and a half. When the South end of *Wincoxbergen* cometh betwixt the two flat Steeples to the Westwards of *Dun-*

The Flemish Coasts, &c.

kirk, then are you thwart of this *Poelder*.

There stand 3 or 4 Mills to the Eastwards of *Dunkirk*, when the outermost cometh over the East end of the Town, that is also a good Mark of this *Poelder* or Shoald, and then the Steeple of *Dunkirk* shall be from you Southeast 5 Leagues.

Betwixt this and the third goeth also a Channel through of 12 and 13 Fathom.

The Dike.

The third called the *Dike*, lyeth from *Callice Cliff* Northeast, and is deep 4 and 5 Fathom; upon the S. & N. end of this Bank are *Poelders*, the Southermost is deep one Fathom, and lyeth also upon the Marks of *Wincoxbergen* about Northwest, somewhat Westerly from *Dunkirk*, and is called the *Polder* of the *Dike*, or *Dike-polder*; the other *Polder* or Shoald of this Bank, is about 4 Fathom and 2 Foot deep, and lyeth Northwest from the *Cloister Ten-duynen*. These Banks are very dangerous; for the *Ruyting* lyeth almost in the fair way, and at low water they have no more than 2 Fathom depth.

The fourth Bank called *Kettle-bank*, lyeth from *Callice Cliff* Northeast and by East, and is deep 3, 4, 5, and 6 Fathom. Upon the South end is a Shoald of 1 Fathom at low water; at Spring-Tides these *Poelders* fall dry. Along by this goeth also a Channel through of 19 and 20 Fathom.

To the Eastwards of the *Kettle-bank*, (*viz.*) betwixt that and the Broad-bank goeth through a great Channel of 19 and 20 Fathom.

In all the Channels betwixt the foresaid Banks, Men may turn to windwards every where from one Bank to the other, and Ankor betwixt the Banks where they will.

Broad-bank.

The South end of the Broad-bank lyeth from *Callice Cliff* East Northeast, and hath one Shoald upon the South end of one Fathom and a half, is throughout 3 and 4 Fathom deep.

The North end is deep 6, 7, and 8 Fathom, and lyeth so far to the Northward, until *Newport* be Northwest from you, or the *Cloister Ten-duynen* be North Northwest 5 or 6 Leagues from you.



The Coasts of England, from Dover to the North Foreland.

Betwixt *Callice* and *Dover*, amidst in the fair way, (or somewhat nearer the *French* side than the *English*) lyeth a narrow Bank of 4 Leagues long, lying about North North-east and South Southwest along the Land of *Blackness*, being called the *Vaen*, and by the *Dutch-men* called *Vrow-sand*, of 5, 6, 7, and 8 Fathom depth, and runneth to the Southwards towards the Land of *Bulloyn*, West and by South from *Callice* Cliff, and South, and South and by East from *Dover*, is the shoaldiest of it, at low water not deeper than 16 or 17 Foot. On both sides of this Bank, as well along to the Eastwards as to the Westwards of it, it is 20, 22, 23, and 24 Fathom deep. Men may Ankor before *Dover* for a North and Northwest wind, right against the Castle, in 10 Fathom is the best Road, and clean Ground. For to Sail into the *Downs* from the Southwards, you must run about the *South Foreland*, within 2 Cables length along by the Land, and Ankor thwart of the middlemost Castle in 7 or 8 Fathom.

The Southermost Point of, *Gooding*, and the *South Foreland* lie Northeast and Southwest asunder.

Betwixt *Gooding* and the *Valley* in the Land off the North *Gooding Foreland*, called *Ramsgat*, lie 2 Shoalds, whereof the Westermost is called the *Querns*, and the Eastermost the *Brakes*.

For to Sail from *Dover* (through within the *Gooding*, betwixt the *Gooding* and the *Brakes*,) to the North *Foreland*, you must go on North and by East so long until that the Mill upon the North *Foreland* come to the West side of the *Valley* in the North *Foreland*, then go yet North and by East, and North North-east, untill that the little Steeple upon the North *Foreland* come to the East side of the foresaid *Valley*, then you shall be to the

The English Coasts,

Northwards of the *Brakes*, and then the little flat Steeple on the South *Foreland* cometh too, or right over the third white Chalk Hill to the Northwards of the South *Foreland*, that is a direct long Mark, for to Sail through betwixt the *Brakes* and *Gooding*, as well when you come from the Northwards as from the Southwards.

Brakes.

For to Sail through within the *Gooding* from the Northwards, you must not come nearer the *Brakes* than in 7 Fathom, and set the South *Foreland* South Southwest from you, and Sail then so right with it, and then you shall run along the best deep. When as the flat Steeple upon the North *Foreland* standeth in *Ramsgat* or the *Valley*, then you shall be thwart of the *Brakes*, and when the Mill commeth in *Ramsgat*, you shall be to the Southwards of the *Brakes*.

Querns.

When you lie in the *Downs*, and that the inner point of the Cliff off the South *Foreland* lie South Southwest from you, then the *Querns* lie North and by East from you, and the end of the *Gooding* Northeast from you.

The North end of *Gooding*, and the Point of the North *Foreland*, lie Southeast and by East, and Northwest and by West a League and a half asunder.

For to sail
through be-
twixt the
Brakes &
the Querns

For to come into the Northwards into the *Downs* through betwixt the *Brakes* and the *Querns*, there standeth a Church upon the high Land of the South *Foreland*, to the Northwards of it, which is a flat Steeple, and the Church somewhat great of Body, and there are 3 Castles upon the Strand of the *Downs*; you must bring the foresaid Church with the flat Steeple right in the midst betwixt the two Southermost Castles, and then you are in the fair way in the middle of the Channel, and that will serve for a leading Mark to run through betwixt the *Brakes* and the *Querns*, and the Course lyeth through South Southwest. If the wind be Southerly, that you must turn to windwards through, run not further over to the Eastwards than that the foresaid Church come within 2 Ships length of the Southermost Castle, for if you should bring them nearer, or together, then you should run upon the *Brake*, and being cast about run not further over the Westwards then that the foresaid Church come within two Ships

Ships length of the three ; for if you should bring them them nearer together, you should run upon the *Querns*; and these Marks will serve to turn to windwards through betwixt the *Brakes* and the *Querns*, either from the Northwards or the Southwards. The *Brake* is steep, being 5 Fathom close along by the side of it, and in the middle of the Channel is but 15 Foot at low water, so that it is deeper by this side of the *Brake*, than in the middle of the Channel. As you turn to windwards, and run over to the Eastwards towards the *Brake*, as soon as you must cast about, or else you should be against the *Brake*; the *Quern* is flat, but nevertheless as soon as you find it shoaldier (in running over to the Westwards the of *Quern*) than 15 Foot, you must cast about again, and so turn through. About half a League from the North end of the *Gooding* to the Southwards, ^{Thwart} lyeth off a flat Tail or Spit of Sand to the Westwards from the ^{marks of a} *Gooding*, a great Musquet shot off, and falleth dry a good ways ^{Tail of} off at low water, which maketh the Channel there betwixt the ^{Sand lying} *Gooding* and the *brake* very narrow; the thwart Marks of this ^{off from the} *Gooding*. Tail of Sand are these: up within the Land a little to the Southwards of *Ramsgat*, stand 3 or 4 high Trees together; when these Trees do come right over the Southermost end of the Cliff that lyeth also a little to the Southwards of *Ramsgat*, then you are thwart of this foresaid Tail of Sand; as soon as you shall be past it, then you shall have more room to turn to windwards, and may run further over the *Gooding*.

For to Sail from *Dover* without the *Gooding* to the North ^{For to run} *Foreland*, you must keep the Point to the Westwards of *Dover* ^{about a Sea} without the South *Foreland*, and go on Northeast until that the ^{board off} North *Foreland* come Northwest and by West from you, then ^{Gooding.} you may boldly run to the North *Foreland*, and Ankor before *Margate*, or where that you shall think it best, but thwart of the Steeple, where the Mill standerh by, is the best Road. Or when the Point of the North *Foreland* lyeth South Southwest, and Southwest and by South from you; there is also good riding in 8, or 9 Fathom. Betwixt *Margate* and the *Reculvers*, Men may Ankor every where in 6 or 7 Fathom at half Flood.

Betwixt

The English Coasts,

Betwixt the *Querns* and the North *Foreland* Men may also run through to *Sandwich*, there runs off a little stone Bank from the shore, called the *Fourfoot*, betwixt that and the *Querns* it is at half Flood 2 Fathom deep. The *Querns* are lately grown much less, and shifted, so that the North end of them is almost gone.



Of the Tides and Courses of the Streams.

A Long the Coast of *Flanders* on the Land, a South and North Moon maketh full Sea.

In the fair way without the *Flemish* Banks in the Sea, a Southwest Moon maketh high water.

In the midst betwixt the Heads, a Southwest Moon.

At *Dover*, a South and North Moon.

In the *Downs* a South Southwest Moon.

At the North *Foreland*, a South and North Moon.

Along the *Flemish* Banks, the fore-Flood falleth over the Banks towards the Land, about the third part of the Tide, afterwards along the Land, but the after-flood falleth to the Northwards along the Sea in the right fair way.

When the Flood beginneth to go there thwart off at Sea, then it is already half Flood on the Land, and the water flowen half ways, so that Men may go into all the Havens on the *Flemish* Coast with 5 or 6 Foot water.

In the midst through the Heads, the Flood falleth Northeast and by East, and the Ebb Southwest and by West.

From *Dover* to the North *Foreland*, the Tide falleth through within the *Gooding* North and South, over the *Brakes* and *Querns*.

Before *Callice* and *Blackness*, the Flood falleth first one quarter to the Land, afterwards North Northeast.



Of the Depths.

IN the right fair way betwixt the *Marsdeep* and the *Heads*, it is 23 and 24 Fathom deep. A little without the *Flemish Banks* 18, 19, and 20 Fathom, but near *Gooding*, or about the *North Foreland*, it is 26, 28, and also 30 Fathom deep, the nearer *Gooding* the deeper water.

Being thwart of *Gooding* in 28 or 29 Fathom, you shall not be 2 Shots of a cast-Piece from it.

For to Sail out of the *Marsdeep* towards the *Head*, go not on otherwise than Southwest and Southwest and by South, (but you must be very careful to take heed of the Tides) when you shall reckon to have Sailed 40 or 46 Leagues, then edge over to the *Flemish Banks*, untill you come in 20 or 18 Fathom; when that you are sure off these Grounds, then go on Southwest, and at length Southwest and by West, and you shall come in the midst betwixt the Heads of *Calice* and *Dover*.

Flanders you may see from the Poop in 16 Fathom, and then you are within the Point of the *Flemish Banks*.

Calice Cliff, and the *South Foreland*, or the Point of *Dover*, you may see when you are before them in 24 Fathom.

Courses and Distances. See *Pilots Sea-Mirroure*, pag. 29.

Of the Latitudes.

The *Heads* and *Dover* lie in

51 degr. 12 minn.

The English Coasts, &c.

How these Lands do shew themselves at Sea.

Wendwynen.

Ostend.

Middlekirk.

Newport.



Thus sheweth the Coast of Flanders betwixt Ostend and Newport.



*Thus sheweth Dover when you Sail to the Westwards of the Vaen,
or Vrow-sand, through the Heads.*



*When you run from the Downs towards the North Foreland,
then the Land sheweth it self thus.*

Newport.

The Broers.

Sonikoten.

Dunkirk.



Graveling.

Callice.



*Thus sheweth the Coast of Flanders, betwixt Newport and
Callice, when you Sail along by it,*



V DEMONSTRATION.

Wherein

Are set forth the Coasts of France, from Blackness to the Island Oldernay, or Ornay, and from Dover to Beachy.

ABout a great League to the Westwards of *Callice Cliff*, lyeth *Blackness* a foul out Point, thwart of it lie many Rocks along the shore. From *Blackness* to the River of *Bullen*, lyeth the Coast South and by East 3 Leagues; a League to the Southwards of the *Ness*, the Land falleth somewhat in with a fair Sandy Bay. In this Bay lyeth a Fisher Village on the Coast, thwart of it in the Sandy Bay is a very good Road for Easterly winds, in 5, 6, 10, 15, and 16 Fathom, according as you will lie far from the shore. For to Ankor there, you must bring the steep of the Village over the midst of the Houses. This place is called *St. John's Road*. A little to the *S. John's* Northwards of that foresaid Fisher Village, stands a Mill, with Road. some Houses; from thence to the Northwards you may not Ankor, for there the Ground is foul and Stony. To the Southwards of the Road towards the River of *Bullen*, lie also some little Rocks along the Coast, which you must not come very near to.

Upon the North Point of the River of *Bullen* standeth a high thick Tower, called the *Tour d'Ordre*, by the Sea-Men the *old Tour* *man*, a special mark to know the River by. About an English Mile *d'Ordre* to the Northwards of this Tower, a little Mile from the shore, *Oldman*. lyeth a little sunken Rock under water, where a Hoy or Smack *Sunken-Rock* may not go over.

The Coast of Normandy,

Bullen.

Upon the South Point of the River of *Bullen* standeth a Stone wall, and upon it a great Beacon of a Mast; thwart of it from the South Point lyeth off a little Riff or Shoald, that you must shun, and run close along by the Head wchich lyeth at the North Point, and hath been there lately made. When you are come within this Head, you must presently let fall your Ankor, and ride there; It is a Tide-Haven, there you must go in at high water, and at low water lie drie upon the Chindle. Without, before the River lyeth a Bank, Men were wont from the Southwards to run in over in 2 Fathom, and from the Northwards in 3 Fathom; but it is now to the Southwards deeper, through the scouring of the water along the foresaid Head, which is made at the North Point.

The Somme

From the *Oldman*, or the River of *Bullen* to *Somme*, is the Course South about 11 Leagues; between them lie also 2 other Rivers, *Cauche* and *Aute*; upon the first lie *Eastaples* and *Monstren*; there you must go in a middle Channel at highest water, within it falleth altogether dry at low water.

For to sail
into the
Somme.

Men may Sail into the *Somme* through 2 Channels, from the East Point called the *East Down*, lyeth off a Sand thwart before the Channel; to the Westwards of that Riff lyeth also another great Bank, between them goeth in the Easter-Channel. For to Sail in there, bring *S. Valery* a Cables length to the Westwards of the West Point of the River, called the *Oordel*, and run in there upon, until you come to the Land at that foresaid W. Point, and from thence close along by it, or as soon as you get again deeper water over the Bank, then turn up Eastward toward the Beacons. From the Point of the *Oordel* lyeth off to the Northwards a little Riff, upon the end of it lyeth a Buoy which you must leave on the Starboard side, and run in close about to the Northwards of it. From the Point of the *Oordel* upwards, it is set along with Beacons, you must run along close by them, until you come within the Point of *S. Valery*, where you must Ankor, and lie every Tide drie. The Sands there within do shift so often, that they are not to be described for always.

For

From Blackness, to the Island of Ornay.

59

For to Sail into the Western-Channel, coming from the East or North, you must run along by the Banks in 6 or 7 Fathom, and not nearer; they are so steep, that a Ship sitting fast upon them with the Fore Castle, at the Stern hath 3 Fathom. Coming towards the Land at the end of the Banks, you shall find a Buoy: Or else, if you come from the West, and bring *Crotoy* 2 Cables length within the *Oordel*, and Sail so right in, you shall find the foresaid outermost Buoy. Besides this, there lyeth 3 other Buoys, whereof that foresaid Buoy on the Point of the *Oordel* is the fourth, and the innermost; you must leave them all on the Starboard side towards the Land, and run in along by them to the Northwards of them.

For to sail
into the
Western-
channel.

These Channels and Sands there within (all until past *St. Valery*) fall at low water altogether dry, the Buoys also fall dry, that Men may go by them; at half Flood with an ordinary Tide there is no more than 2 Fathom water; it is not good to go in there before that two third parts of the Flood be spent. With an ordinary Tide it floweth there 5 and 6 Fathom, but with a Spring-Tide 7 Fathom up and down. At high water, and Spring-Tide, a Man may go over all the Banks and Sands with 8 or 10 Foot water, 5 Leagues upwards lyeth *Abbeville*.

Thwart of the *Somme*, it is far off into the Sea shoald water, 5, 6, 7, 8, 9, and 10 Fathom, 3 or 4 Leagues off into the Sea: He that cometh from the West, and findeth himself in dark and misty weather, to be in such shoalding, may be well assured not to be far from the *Somme*.

From the *Oldman* to *Diep*, the Course is South Southwest 18 Leagues, but from the *Somme* to *Diep* Southwest and by West 8 or 9 Leagues. About half way between the *Somme* and *Diep* lyeth the River of *Han*, within it on the North side lyeth *Tresport*, being also a Tide-Haven, where Men must go in at high water, and at low water lie dry.

At the East side of the Haven of *Diep*, lyeth a Rank of Rocks, and from it lyeth a little Riff of Chindle towards the North, or the West, to the Southwards of this Riff goeth in the Channel, about Southeast in, it is very narrow, and a short Inlet, therein lie 3 Buoys in the midst of the deep, not above a

The Coast of Normandy,

stones cast one from the other, Men may run in on both sides of them; coming to the end of the Buoys, they must keep the middle of the Channel, and run in between the Heads, untill they come within the Town, and there make fast with a Cable on the Shore. Men may not Sail in there before Flood, but not at half Ebb; at low water it falleth altogether dry, but within at the Town, Men may ride afloat, at high water there cometh 3 Fathom, or at the highest, not more than 3 Fathom and a half water. There come out always Pilots to bring Ships in.

*S. Valery
in Caux.*

From *Diep* to *St. Valery in Caux*, it is Southwest and by West 4 Leagues; that is also a Tide-Haven, where you must go in with high water; it is a narrow Channel, where you go in between to the Heads, there is neither Sand nor Bank before it that can hurt you; being come in, you may let fall your Ankor, and make you fast with a Cable on the Shore. He that hath neither Cable nor Ankor, may (being come there within) Sail his Ship on against the Shore in the Chindle, and so save his Ship and Goods without damage.

Fecam.

From *S. Valery* to *Fecam* it is West Southwest 4 Leagues; that is a deep Tide-Haven; there remaineth at low water little less than 2 Fathom water. At the East side of the Havens-Mouth lyeth a Bank or Plate, Men may with small Ships Sail in through between it and the Land, and so run in Sounding, borrowing it 8 or 9 Foot along by the East Shore, which is flat. For to Sail into the Westwards of the Plate, you must keep the Tower of *Fecam* without the Land, or without the West Point of the Haven, and then it shall be S. Southeast from you, run then upon that Mark into the Haven, and then the foresaid Sand shall remain on the Larboard side of you; and at half Flood you shall have in the Havens Mouth, 2 Fathom water; being come in before the Town, you may Ankor there by the Western Shore in 3 Fathom.

Struyfaert.

From *Fecam* to *Struyfaert* it is West Southwest three little Leagues. Without the Point of *Struyfaert* lie 2 high sharp Rocks. From thence to *Seynhead* it is South, and South and by West 2 Leagues and a half.

About

From Blackness, to the Island of Ornay.

61

About Northwest from *Seynhead* lyeth a Bank, upon which at low water remaineth no more than 2 Fathom and a half water: When the Town of *New-Haven* cometh without *Seynhead*, then are you thwart of the Back; for to avoid it, run in close aboard the *Seynhead*, along until you come within the first Mill, there let fall your Ankor in 6 Fathom, and stay for a Pilot to bring you into the Haven.

For to Sail into the River of *Roan*, coming from the North ^{For to sail} or the East, you must run close aboard the Land to the North- ^{into the} wards of *Seynhead*, and along by it, so long until the South ^{River of} side of the River come unto the Point of *Seynhead*, then run in with it, until the Land to the Westwards of *New-Haven*, come without *New-Haven*; Sail then unto the Haven of *New-Haven*. Or else, if you will go without about the Bank or *Rettires*, then edge over to the Westwards so far from the Land, until the River come open, Sail then towards the Point of *Tochet*, and run in upon your Lead by it; there is at high water 3 Fathom, and at low water no more than 1 Fathom. The *Rettiers* is a stony Bank lying in the midst of the River of *Seyn*, lying over towards the Point of *Honfleur*, at low water it falleth at some places dry, at half Flood it is to the Southwards 3 Fathom, but to the Northwards 2 Fathom deep. When the Land of *Caen* is without the Point of *Seynhead*, and you Sail then with it South on, then you run to the Westwards of it, or along without it. Or else, if you keep *Struyfaert* a Hand-spikes-length without the Point of *Seynhead*, then you run also without it. When the Easter-Gate of *New-Haven* cometh over the Easter-Head, and the Easter-Mill, Sail then so on, keeping them so, then you run in right to the Northwards of the *Rettires*, and also you can take no hurt of the Bank that lyeth towards *Seynhead*. At *Habel* or *New-Haven*, Men must go in at high water, and within lie every Tide dry.

The River of *Sein* must be Sail'd into upon the Tide, when the most, or the strongest of the Flood is spent, then you may Sail along by the Land upon your Lead, until you may see it open into the River of *New-Haven*, when then the Souther Castle cometh over the Easter-head, and the Mill; run then right

The Coast of Normandy.

right in upon it; but it is best to Ankor half way betwixt the Castle and *Seynhead*, and there to stay for a Pilot: If there come none off, then Sail from thence right with the Castle that standeth upon the Head, there it is deepest water.

To Sail from *New-Haven* upwards towards *Roan*, is not well to be done without a Pilot; you must go with the Tide through the first Travail or Banks, which lie from *New-Haven* to *Honfleur* Southeast, along by the Souther-Land; and from thence along the North side of the River to *Quillebeuf*, being come there, you are through the first Travail. You must also be well advised, and take good heed for the strong Spring by the *Normans* called *La barre*, which every Tide cometh on so strong with the Flood, that Ankors and Cables have enough to do to hold a Ship: For that and other dangers more, it is not good nor convenient to Sail up the River without a Pilot.

Tochet. Two great Leagues to the Southwards of the River of *Roan*, lyeth a Tide-Haven called *Tochet*; on the West side of the entry standeth a Beacon, by it you must go in, or you may Sound it in by the Easter-shore. Southwest, or Southwest and by South from the Point of *Seynhead*, about 6 or 7 Leagues off, lie many Banks, a good ways in the Sea; you may Sail on both sides of them (as well to the Eastwards as to the Westwards) into the *Foss* of *Caen*, which lyeth in most South, and lyeth in a Bay. At the West side lyeth a Chindle, where Men may ride within it, it is wide, and broad, and Sandy Strand; the East Land is Sand-Hills, and far flat in 6 and 7 Fathom; there Men may go in, Sounding with the Sounding-Pole.

Cape Schierbrough. From *Seynhead* to *Cape de Barfleur*, or *Cape de Schierbrough*, the Course is West and by North 19 Leagues. About four Leagues to the Eastwards of it lie the Islands of *St. Marques*, Men may Sail round about them, but it is not there very clean.

S. Marcus
La Honde. A League to the Westwards of the Island of *St. Marcus* lyeth *La Honde* a flat Tower; to the Westwards of it lyeth the Point of *Barfleur*, betwixt both is a great Bay, where Men may lie in 6 or 7 Fathom Land-lock'd for a North Northwest wind. A Northeast wind bloweth there open in.

From

From Blackness. to the Island of Ornay.

63

From the North Point of *C. de Barfleur* (which lyeth North ^{Sunken-} Northwest from you when you lie in the Road) lyeth off a Bank ^{Rock.} or little Riff, yet a Ship may go over it. Northeast a League and a half off from the foresaid Point lyeth a Rock under water, where Ships may not go over.

From *C. de Barfleur* to *Schierbrongh* it is Northwest and by West 4 Leagues, that is a little Tide-Haven. To the Westwards of the Point of *Barfleur* lie some foul Grounds, if you keep the high Land of *Schierbrongh* without the *Cape de Wyck*, you ^{Cape de} shall not come too near them. ^{Wyck.}

Before *Cape de Wyck* is a good Road in 6 Fathom, a little to the Eastwards of the 2 high Rocks in a Sand-Bay.

Before *Schierbrongh* lie some Rocks or little Islands, which are clean round about; to the Westwards of it lyeth a Tide-Haven, called the *Foss* of *Moberille*, before it on both sides lie 4 or 5 high Rocks, at high water Men run through betwixt them, and so into the Haven. A great League and a half to the Westwards of it lyeth *Cape de Hagne*.

Two Leagues West and by North from *Cape de Hagne* lyeth *Cape de* the Island *Aldernay* or *Ornay*, betwixt them goeth the Race of ^{Hagne.} *Blankert* through.



The Coast of England.

THe Point of *Douglas Ness* lyeth distant from *Dover* South W. ^{Road un-} and by W. 8 Leagues. At the E. side of the *Ness* in *Romans* ^{der the} *Bay*, thwart of the *Romans-Tower*, is a good Road for West, *Ness.* and Southwest winds: For to Ankor there, run so far in the Bay, that the Point of the *Ness* be South, and South and by West from you; Ankor there in about 7 or 8 Fathom; you may also Ankor on the West side of the *Ness*, for a Northeast wind, so that the Point lie East and by North from you.

For

The Coast of England,

For to Sail into the Camber of *Rie*, coming from the West, you must keep *Beachy* without the Point of *Fairlee*, and run so towards the *Ness*; and being come in fair by it, run in without 2 Cables length along by it unto the end of the *Ness*, then edge up to the Westwards, and leave the Beacons on the Starboard side, until you come before the Castle *Camber*, that standeth upon the Southern Chindle, there you may Ankor in 4 and 5 Fathom: From thence along even unto the Town of *Rye*, it is all set with Beacons, which stand along by the East side of the Deep unto the *Daries*, which at low water fall dry. In Sailing unto *Rye*, you must leave all the Beacons unto the Starboard side, and run indifferent close along by them.

Road under the
Beachy.

The Point of the *Ness* and *Beachy* lie West Southwest, and East Northeast distant 7 Leagues. *Beachy* is by the 7 white *Cleaves*, the best known Land that a Man can see any where. To the Eastwards of *Beachy* Men may Ankor for Westerly winds in 6 or 7 Fathom, so that the Point be South, and South and by West from you.



Of the Tides and Courses of the Streams.

BEfore *Calice* and *Blackness*, the Flood falleth first 1 quarter to the Land, afterwards North Northeast.

Betwixt *Blackness* and *Bulleyn*, the Flood falleth North and by East by the Land; but a Sea-board in the *Offing* Northeast. A South and Southeast Moon maketh there the highest water.

Betwixt *Bulleyn*, *Diep*, and before the *Somme*, the Flood falleth first 1 quarter to the Land; afterwards Northeast and by East, and the Ebb Southwest and by West.

Betwixt *Diep* and the *Schrysaert* without the Land in the fair way, the Flood falleth Northeast and by East, and the Ebb Southwest and by West.

From Dover to Beachy.

65

At *New-Haven*, and in the River of *Roan* a Southeast Moon maketh a high water.

From *Struyssert* to *Caen* in the *Foss*, the Flood falleth South Southwest, and the Ebb North Northeast.

Before the Haven of *Caen* a South Southeast Moon maketh high water, within the Haven, a South and by East Moon.

At *Markel*, *la Honge*, *Barfleur*, *Sherbrough*, and *Cape de Hague* by the Shore, a South and by East Moon.

From *Seynhead* to *Barfleur*, the Flood falleth by the Land East and by North, and the Ebb West and by South. But in the Channel a Sea-board the Land, the Flood falleth away East Northeast, and the Ebb West Southwest.

At *Cape de Hague* by the shore, a South and by East Moon maketh high water.

In the Race of *Blankert*, a North and by East, and South and by West Moon. The Flood falleth through the Race Northeast, and the Ebb-Southwest.

In the midst betwixt the Heads a Southwest Moon.

At *Dover* a South and North Moon.

Betwixt *Dover* and *Dongie Nefs*, and likewise thwart of the *Nefs* a South Southwest Moon maketh full Sea.

In the Channel of *Winchelsey*, a South and by East Moon.

At *Beachy* by the shore, a South Southeast, and North Northwest Moon.

In the fair way thwart of it, a South and North Moon.

From *Dongie Nefs* to *Dover*, the Flood fallerh Northeast and by East, and the Ebb Southwest and by West.

From *Beachy* to the *Nefs*, East Northeast, and West Southwest.

At *Beachy* by the Shore before the 7 *Cleves*, the Floud falleth East and by South, and the Ebb West and by North.



Of the Depths.

C Alice Cliff and the South Foreland, or the Point of Dover, you may see when you are before them in 24 Fathom.

To the Southwards of the *Oldman*, or *Tour d'ordre*, lyeth the high Land of *Eastples*, which is very good to be known, because thereabouts is no Land so high. When that is North Northeast from you, and you be thwart of the *Somme*, it is there deep 8 and 9 Fathom.

Upon the Land of *Somme* towards *Diep*, stand many sharp Towers, and some Mills and Trees, and hath all along the Coast a Sandy Strand.

Before *Diep*, Men may see the Land in 20 and 22 Fathom.

About 4 Leagues without *Struysaert* it is deep 20 Fathom.

Between *Diep* and *Seynhead* stand also many sharp Towers, Trees, and Houses upon the Land; *Struysaert* is best to be known on a great Rock like a high Tower, thwart of it in the fair way it is deep 16 and 17 Fathom.

About *C. de Barfleur* and *Sherbrough*, 4 Leagues from the Island, it is deep 30 Fathom.

Barfleur is a high Point; below upon the white Land standeth a flat Tower, 2 Mills, and some little Houses, and to the Westwards of it is more white Land.

Upon *Cape de Hagne* standeth a Castle, with a little Turret; a little to the Eastwards of it in the Land standeth a sharp Tower. Two Leagues to the Eastwards of it lyeth *Sherbrough* with a flat Steeple.

Betwixt *Winchelsey* and *Picardy* in the midst of the Channel it is deep 26 and 27 Fathom; upon such Depth Men may see *Fayerly* and the Land of *Dover*.

Without *Beachy* thwart of the 7 *Cleaves* it is deep 28 and 29 Fathom.

For to know the Courses and Distances from place to place. See the Pilots Sea-Mirroure, in pag. 32, 33.

Of the Latitudes.

| | |
|----------------------------|------------------|
| The Heads and Dover lie in | 51 degr. 12 min. |
| The Somme lyeth in | 50 degr. 6 min. |
| The Point of Struyfaert in | 49 degr. 35 min. |
| Beachy lyeth in | 50 degr. 50 min. |

How these Lands do shew themselves at Sea:



Thus sheweth Fairley when you Sail along by it.



VI DEMONSTRATION,

Wherein

*Is Deciphered the Coasts of Britanny,
from the Island of Ornay, to the
Island of Ushant.*

*Cape de
Hague.*

Ornay.

*The Race of
Blankert.*

TWO Leagues West and by North from *Cape de Hague*, lyeth the Island *Aldernay* or *Ornay*, betwixt them goeth the Race of *Blankert* through. *Aldernay* or *Ornay* is about 3 Leagues long, and lyeth East and West. The East end is clean; Men may Sail reasonable close along by it, but the West end is very foul: There lie some little Islands close by the West end; being past them, Men may Sail towards *Jarsey* without any fear.

To the Southwards of the foresaid little Islands, at the West end lyeth off a ledge of Rocks within it; On the South side it is clean, except at the South Point, that is also foul. He that will Ankor on the South side of *Ornay*, must be mindful thereof, and Ankor a little to the Eastwards of the Tide-Haven.

From the West end of *Ornay* lyeth a great multitude of Rocks West and by North, and West Northwest off 3 Leagues into the Sea.

Upon the outermost and Westermost end, lyeth a great high Rock, with many other smaller Rocks about it. Half ways betwixt this great Rock and *Ornay* lyeth another great Rock, but not so high as the foresaid Westermost; from it lie off a multitude of Rocks towards the outermost, which fall dry at low water, but at high water many lie under water. These 2 great

Casques.

Rocks are called by the French, *Les Casques*, and by the Dutch, the

the Island of Ornay to the Island of Ushant.

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the *Kiskasseu*, and by the English, the *Caskets*. Close by the West end of *Ornay*, towards the *Caskets*, lie other 2 great rans of Rocks, called the *Baroches*.

Baroches.

From the East Point of *Ornay*, to the E. end of *Garnsey* (about to the Southwards of *Ornay*,) the Course is W. S. west 9 Leag. but from the *Caskets* to the West end of *Garnsey* Southwest and by South 6 Leagues.

If you will Ankor under *Garnsey* (coming from the *Caskets*) then run on to the Northeast Point of *Garnsey*, and so far to the Eastwards of it, until you get sight of the Castle that standeth upon the Rock on the East side of *Garnsey*. Of if you come about to the Westwards of the *Caskets*, then go on Southeast, or somewhat more Southerly, until the Northeast Point of *Garnsey* be South and by West from you, Sail then towards it, till you shall come in sight of that foresaid Castle upon the Rock. Bring that over the South Point of *Garnsey*, and Sail in upon that Mark, betwixt the Island *Arem* or *Harm*, and *Garnsey*, untill you come by the foresaid Castle; betwixt these Islands it is on both sides full of Rocks, whereof you must take good heed, especially on the Larboard side towards *Arem*; when you are come by the Castle, you may Ankor within or without it, where you please, without the Castle in 12 or 13 Fathom, or within the Castle (that is betwixt the Castle and *Garnsey*) in 6 or 7 Fathom at low water. It doth flow there 6 or 7 Fathom up and down, which Men must reckon upon.

*Road under
Garnsey.*

Under the South side of *Garnsey*, Men may ride for Northwest, North, and Northeast winds. If you come from the West, or from the *Caskets*, you must run close about by the Southwest Point, called *C. de Gruse*, and along by the South side of the Island, well half ways the Island, and Ankor there where you think good, in 18 or 19 Fathom. If the wind shift to the Southwest, or to the West Southwest, then you may run about by the S. Point unto the foresaid Castle, and Ankor there, either without or within it, as here before is said. From the aforesaid South Point, lyeth off a little ledge of Rocks, whereof some Rocks lie above, and some under water; these you must avoid when you Sail about by it.

South

The Coast of Britanny, from

South and by West, and South Southwest about 8 Leagues from *Garnsey* lyeth a great ledge of Rocks, more than a great League called *Rockedunes*.

About 2 Leagues Southeast from *Garnsey*, lyeth the Island *Sark*. There Men may Ankor round about it in 25, 26, and 27 Fathom. From the North end lie off some Rocks, whereof some lie above, and some under water. At the South end hereof lie also some Rocks, but all above water.

Between *Garnsey* and *Sark* lie 2 other little Islands, *Arck* and *Aren*, or *Harm*; there Men may Sail through betwixt them.

The Island *Jarsey* from *Garnsey* Southeast, distant 7 Leagues; round about this Island are good Roads at divers places. All along the North side Men may Ankor in 10 and 11 Fathom. At the same North side, somewhat within the West Point, lie some great Rocks a good ways off from the shore, called the *Paier Nosters*, or *Pierreleg*. At the S. west Point lie many Rocks which lie off a great ways into the Sea, to the Northwards of them, viz. betwixt them and the Westermost Point; at the West side of *Jarsey* Men may Ankor at divers places in 10, 11, and 12 Fathom. At the South side of *Jarsey* is also a good Road for a Northwest, and West Northwest winds. At the East side lyeth *S. Katherine's Bay*, there is also very good Roads for Westerly winds.

The West end of *Jarsey* and *St. Maloes*, or the Island *Sisember*, before *S. Maloes* lie South and by East, and North and by West 8 or 9 Leagues asunder. About half way betwixt both right in the fair way, lie a great number of high Rocks together, which contain in Circuit in Sailing, about 7 or 8 Leagues, called the *Mankiers*, they lie far towards *Jarsey*, some above, and many under water, so that it is not without great danger to run through betwixt *Jarsey* and the *Mankiers*.

When Men will Sail through the Race of *Blankaert*, bound for *S. Maloes*, they run commonly through betwixt *Sark* and *Jarsey*, may also Sail to the Eastwards of all the Islands and Shoals along the Coast of *Normandy*, towards *St. Maloes*, in manner as followeth.

When

the Island of Ornay, to the Island of Ushant.

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When Men come a little past *C. Voorha*, they shall meet (thwart of the Island *Jarsey*) with 3 or 4 high Rocks, called *Le Benf*, Men may run to the Westwards of them, and so through betwixt them and the Island *Jarsey*, or else to the Eastwards of them along by the main-Land, even as they will, towards the Riff of *Mortefaim*, that lyeth upon the Coast of *Normandy* South Southeast, 8 Leagues from *C. de Voorha*. *Le Benf.*

Over against, or thwart of the Riff of *Mortefaim*, lyeth a rane of Rocks lying East and West, more than a League in length, called *Benfkin*, at the East end many of them lie above, and at the West end most of them lie under water. Men must Sail through betwixt them and the Riff of *Mortefaim*, that are bound for *Granville*. *Benfkin.*

Betwixt the foresaid Rocks *Benf* and *Benfkin*, lyeth another great ran of Rocks called *Eckeros*, which lie off from the Southeast Point of *Jarsey* towards *Granville*; you must leave all these Rocks on the Starboard side, and run along to the Eastwards of them. *Eckeros.*

From the Riff of *Mortefaim* to *Granville*, the Course is South Southeast, and from *Benfkin* Southeast 4 Leagues.

Cape de Voorha and *Granville* are 2 Points that lie without the other Land, About the South Point of *Granville* lie 2 or 3 little Rocks; along by them Men must run in within a Pier or Head, where the Ships lie dry at low water. Betwixt *Cape de Hague*, and *Granville*, Men may see upon the Land many little Houses, Mills, and Trees, as they Sail along by it. A little to the Southwards of the Riff *Mortefaim*, stands a Church with 2 Steeples, called *Quotanse*. All along this whole Coast is every where good Ankerage in 6 or 7 Fathom, especially a little to the Southwards of *Cape de Hague*. *Granville.*

About 2 Leagues West from the Point of *Granville* lyeth another great rane of Rocks, 2 great Leagues long, lying East and West, called *La Shaussee*; betwixt them and the Point of *Granville* Men must Sail through that are bound for *Concalles*, or *S. Maloes*. *La Shaussee*

About 5 Leagues to the Southwards of *Granville*, in a great Bay, lyeth an Island before the River of *Avrant*, about a League

The Coast of Britanny, from

League without the Land, called *Mount de S. Michael*, upon it lyeth a Castle, or little Town called *S. Michael*, with a high Tower which Men may see at Sea. This Bay is to the Southwards of *Granville*, within the Rocks of *Concalles*, very flat and rising Ground, from 13, 10, 8, 6, and 4 Fathom to 1 Fathom, so that at low water the Bay falleth so far dry, that from the Strand Men see not Sea nor water.

Concalles. From *Granville*, to the Point of *Concalles*, the Course is S. west 5 l. from that E. wards lie 3 Rocks, under which Men may Ankor in 10 Fathom. For to Sail to the Town, Men must run in betwixt the Point and the foresaid Rocks. It is betwixt them both 8 and 9 Fathom deep. Before the Town it is shoaldier water. To the Northwards of the Town lie other 2 Rocks, there Men may also Ankor under in 5 and 6 Fathom water.

From the outermost Rocks by the Point of *Concalles*, until you come before *S. Maloes*, the Course is West, and West and by South 5 Leagues.

S. Maloes. Before the Haven of *S. Maloes*, lyeth an Island called *Sisember*; upon the West end thereof standeth a Mill, and upon the East end a Church, with some little Houses, being a Friery; coming out of the Sea, you can but even scarce see the Church; but being within the Island you may see it better, because it standeth on the South side of the Island. A great shot of a cast Piece to the Eastwards of *Sisember*, lyeth a great high Rock, called the *Mewstone*: betwixt them and *Sisember* it is all full of Rocks and Stones, which at high water lie most under water: there is a little Channel betwixt them both, which the *Frenchmen* use with their small Shipping, through betwixt the Rocks, but is not to be used with great Shipping, neither by them that are not very well acquainted with it.

Betwixt the *Mewstone*, and some other Rocks to the Eastwards of it, lyeth a Channel South, and South and by East, called *La Congie*. For to Sail in there, you must run in close aboard to the E. wards of the *Mewstone*, S. east and by East right in with the Town, until you be gotten in 2 third parts of the distance (between the *Mewstone* and the Town) from the *Mewstone*, and are one third part of the distance from the Town; that

that is, when the *Mewstone* is twice so far from you as the Town, then you shall see by the Northwest Point of the Town, 2 great Rocks, about a cast Piece shot from the foresaid Point; upon each Rock standeth a little House, the outermost is the smallest, and is called the little *Bee*; the nearest to the Town is the greatest, and is called the great *Bee*, Sail then towards them, and run in about them within a Cables length of them, but keep that Course so long, untill that the little Tower (that standeth a little to the Southwards of the Town upon the Point) come over the Tower of *Bore* a little to the Eastwards of *Saledoor*, keep them one over the other, and Sail so in, unto the South end of the Town, where the Mills do stand, then you shall see there upon the Rocks 2 Beacons, run betwixt them through at high water, until you come within the Town at the East side; the Ships lie Moored with 4 Cables, dry at low water, 2 fast on the Town, and 2 upon the Sand. Betwixt these 2 foresaid Beacons to the Southwards of the Town, and thereabouts, is the Ground sharp, Rockie, and Stony, therefore Men must take heed not to stay there at low water, or to ground there; but within on the East side of the Town, it is clean Sandy Ground, there may the Ships lie a ground without danger.

A little within, or to the Southwards of the foresaid Rock, the little *Bee*, Men may Ankor in 5 or 6 Fathom water at low water, so that the Tower of *Bore* cometh little to the Eastwards of the little Tower upon the Point to the Southwards of the Town; that Road is called by the French *La Rause*, there Men commonly first Ankor, and stay for high water, for to go in about to the Southwards of the Town. It floweth here at S. *Maloes*, and thereabouts, 7 Fathom up and down with an ordinary Tide.

From the West end of *Sisember*, lie off also a great many Rocks along to the Westwards, more than a great shot of a cast Piece, at the end of them goeth in the Western-Channel of S. *Maloes*, East and by North in. For to Sail in there, you must look out for a sharp little Tower, that lyeth somewhat to the Northwards, or to the Eastwards of S. *Maloes*, within the Land called *Pelem*; when you have brought that East and by

L

North

The Coast of Britanny, from

North from you, then you shall see upon the shore right against it, a great black Rock, which for Blackness sheweth it self without all the other Rocks thereabout, and thereby is very easie to be known : Bring that Rock and the foresaid little Tower one to the other, and Sail so right in until you come thwart of the Island *Sisamber*, or else that the little Tower (upon the Point to the Southwards of the Town) come to the Tower of *Bore*, to the Eastwards of *Saledoor*, Sail then towards the Road of *La Ranse*, to the Southwards of the little *Beu*; or else if it be high water, you may run in upon the Marks, and then in about to the Southwards of the Town, as here before is said.

When you Sail into this Western Channel, you shall leave on the Starboard side a high Rock (called the *Schoorsteen*) with more other Rocks to the Westwards of it, which at high water are most of them over-flown. On the North side, that is, on the Larboard side, lie also many Rocks, whereof many of them are over-flown at high water, and also many remain above water.

More a
Southern
channel.

Yet a Southern Channel lyeth in by the Land to the Southwards of the Rock of *S. Anthony*, upon Marks that Men may see a Stearn the Ship, but it is not used but with small Ships.

Stony-
Bank.

About half ways betwixt the Western Channel of *S. Maloes*, and *C. de Farela*, lyeth a stony Bank under water. A little to the Westwards of *C. de Farela*, lyeth a great Rock. When you will Sail from *C. de farela* towards *S. Maloes*, and that you keep the foresaid Rock right upon the Point of *Farela*, you shall so (without fail) Sail upon the Stone-bank : but if you keep the Rock hidden under or behind the Point, then you shall Sail along to the Southwards of it, Or else if you keep it without the Point (so that you may see through betwixt it and the Point) then you shall Sail along to the Northwards of it. The foresaid Rock is a good Mark for to know *Cape de farela* by.

Four Leagues West from *St. Maloes* lyeth a great Sand-bay, where Men may lie Land-locked for all winds : Men use to Anchor within a great Rock, right against a Mill, and some Trees.

About

the Island of Ornay, to the Island of Ushant.

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About 2 Leagues Northwest from that Sand-bay lyeth the *C. Favela* *Cape de Favela*, which is also called *Cape de Late*, after the Castle *de Late*, that standeth to the Eastwards of the Point, there is a good Road for West and Southwest winds.

Two great Leagues Northwest from the entry of the Haven of *S. Maloes*, lyeth the *Oyster-bank*, there under it Men may *Oysterbank* Ankor in 6 or 7 Fathom.

To the Westwards of *Cape de Favela* unto the North end of the Island *Briack*, the Course is West and by North 9 or 10 Leagues. Two Leagues from the Land West from the Cape, lyeth a great ran of Rocks above water. Between the foresaid Cape, and the Island *Briack*, lie the Havens or Rivers of *St. Brioux*, and *St. Benit*.

The Island *Briack* is 2 Leagues long, and lyeth South South-west, and N. Northeast, when you come from the E. you shall see 2 Mills upon it, and betwixt them a high round Hill, with a little House upon it : you may Sail round about this Island, and may make Roads on every side where you will, although round about it here and there lie some Rocks, yet it is all over good Ankor-ground, A good ways off from the Northeast Point lyeth a Rock called *Souff*, and at the North end lyeth a Ledge of Rocks under water, whereof you must take heed.

A great League West Southwest from *Briack*, three or 4 Leagues a Sea-board the Land, lie the out-Rocks, called the *Pickels*, Men may Sail round about them also ; but to the Eastwards of them towards the main Land, lie many sunken Rocks.

Four Leagues to the Westwards of *Briack*, lyeth the *Port-Blank* upon a great River, called *Lantrilliers* ; to the East *Lantrilliers* wards of this Haven lie off many out-Rocks.

To the Westwards of *Port-Blank*, lie the *Sept Isles*, or Seven Islands, lying from the *Pickels* distant 5 Leagues, East and West. A League to the Southwards of them lyeth the *Greenland*, there you may ride round about it. Between the Seven Islands you may not Sail through, but to the Southwards of them : betwixt them and the *Green-Island* goeth a broad Channel through. From the Eastermost Island lyeth off a foul Riff to the Southwards, upon the outermost end of that Riff lyeth

The Coast of Normandy, from

a Rock, as a good Mark to Sail about the Riff. Northwest upon the West end of the Seven Islands, lyeth also a sunken Rock, which at low water may be seen. Men may also Sail along by the Coast from *Port-blanc*, within to the Southwards of the *Green Island*, and come out again into the Sea to the Westwards: from thence Northwest off into the Sea, lie the *Triacle*

pots *Pots*, these are great fearful out-Rocks, which lie spread wide and broad West Southwest from the Seven Islands, and 4 or 5 Leagues a Sea-board the Land.

Between the *Triacle Pots* and the Seven Islands lyeth the River *R. Laminos* of *Laminos*, to the Westwards of the *Green Island*: For to Sail in there, Men must take good heed of the Northeast Point, which is foul.

Thwart of the Seven Islands upon the main Land, standeth a Church with a high Steeple, called *Our Lady of the Clearness*, thereby Men may know them.

Thwart of the *Triacle Pots* standeth also a high Tower, thereby Men may know when they are near them, but it must be very clear weather, before Men can well discern it upon the Land.

He that cometh by Night or dark weather from the *Fourn*, or *Uphant*, and is bound to *S. Maloes*, let him not go with a Southerly wind, to the Eastwards of East Northeast, or Northeast and by East with a Westerly wind, so long until he hath the length of the *Triacle Pots*, that they be on his broad side. The Floud falleth Southeast within the *Triacle pots*, and the Seven Islands, and should by Night easily draw a Ship towards them. By Day, or when there is sight, there is no such danger.

Within the *Triacle pots* lyeth the Tide-Haven of *S. John de Day*, two Leagues to the Westwards of the *Green Island*, and 2 Leagues to the Eastwards of *Morlions*, Men may Sail from thence through the Rocks unto *Morlions*, and Ankor in 5 or 6 Fathom at low water.

To the Westwards of the *Triacle pots* lyeth a great Rock, *Morlions*, the Eastern entry of *Morlions* lyeth from it Southwest and by South, distant 2 Leagues, but the Western entry lyeth from it West.

West Southwest, and West and by South 4 or 5 Leagues, that goeth in by a great long ragged Rock. This entry Men may Sail in South, and South and by West unto the Castle of *Morlaix*; being about the Castle, they may run through the Rocks again to the Eastwards, and run out again at the Eastern entry North Northeast, and North and by East into the Sea, according as the Tide shall be: the Flood cometh there out of the Northwest.

If a Man would go from *Morlaix* to *Morlions*, he may go on East through the Rocks, and so Sail to it: It is all broken Land, and there remaineth at low water 5 Fathom depth.

If you are bound to *S. Paul de Lion*, you must run right with *S. Paul de the great Rock*, with the 2 Horns or Saddle, and so close along by it: being past it, edge to the Land; upon the Strand lyeth a Village, called *Plempoll*, Sail right with it, and along by it, to the Eastwards of it goeth in the River. These are all Tide-Havens, but betwixt the Rocks of the *Morlions*, and the Islands Bay, it is at low water deep enough for to save a Ship.

The Land of *S. Paul de Lion* is double Land, upon *S. Pauls Church* stand 2 sharp Steeples. The Island *Isle de Bas*, lyeth thwart before it, upon it standeth 2 Stakes, to see too a far off like Mills. Upon the East end of that Island lyeth a very high ragged Rock, when you are to the Eastwards of this Rock, you shall see 2 sharp Steeples a little one from the other, these are the Steeples of *Plempolle*: you may also then see the Castle of *Morlaix*, lying Southeast from you upon a high Rock.

The foresaid outermost long ragged Rock of *Morlaix*, lyeth from the top of the Island *Isle de Bas*, East, and East and by South 3 or 4 Leagues. Men may Sail along by the main Land within, and through these Rocks, until they come to the Seven Islands; they are all great Bays; where in most places is good Ankor-ground.

Five great Leagues North and by East of *Isle Bas*, and Southwest and by West 27 Leagues: From the *Caskers* lyeth a dangerous Rock or Cliff called *Roche Blanche*, and lyeth from Seven Islands West Northwest 9 Leagues.

Within

The Coast of Britanny, from

Roskow.

Within the *Isle de Bas* lyeth the Town of *Roskow*, you may Sail into the Haven of *Roskow* on both sides of the Island.

For to Sail into the Eastern Channel, when you are passed by the high Rock with the Saddle, or 2 Horns, called *Le Tan-reau*, and come by the Land, betwixt the East Point of the Island, and the Point of the main Land over against it; you must Sail still keeping the middle of the Channel. It is in this Channel 7 and 8 Fathom deep. Being come within the Point of the Island, you must run in about by it West and by South, and West on, until you come about half ways within the Island, and Ankor there in 8 or 9 Fathom. And then *Roskow* shall lie South, and South and by East from you.

If you will Sail into the Western Channel, you shall see to the Westwards of it, close by the main Land 2 great long Rocks. From the Point of the main Land, a little to the Eastwards of the Eastermost long Rock lyeth off a Riff from the Land, which maketh the West side of the Channel; you must run in South-east betwixt that Riff and the West Point of the Island, and when you come within the Point of the Island, you must edge up Northeast unto the midst of the Island, and Ankor there, as here before is said.

From *Isle de Bas* along to the *Fourn* or *Ushant*, lyeth the Coast West Southwest 16 Leagues.

From the Island *Isle de Bas* unto the *Fourn*, (the outermost or Westernmost end of the main Land of Britain) the Course is West Southwest, and West and by South 13 Leagues. About half ways betwixt them both lyeth *Obverack*, or *Abberwrack*.

About a League Northwest without the Rocks of *Obverack* or *Abberwrack*, lyeth a ran of Rocks under water. They that by Night will sail or turn to windwards from the *Fourn* or towards the *Fourn*, let them not come thereabouts nearer the Land than in 45 Fathom.

*Abber-
wrack.*

The Fourns

A League to the Eastwards of the *Fourn*, and all along the Coast even unto the *Fourn*, lie many long black ragged Rocks, in many places appearing like Villages, these are called the *Ouens*, within them on the main Land (which is not very high) Men shall see (sailing along by them) many white Sand-Bays, and

[the Island of Ornay, to the Island of Ushant.

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and here and there some little Houses, whereby the foresaid Land thereabout is very easie to be known.

The *Fourn* and *Ushant* lie West Southwest, and East Northeast distant 2 great Leagues. *Ushant* sheweth it self at Sea at the South end low, and at the North end going up sloaping; upon the midst of it standeth a little flat Tower, by which Marks it is good to be known.



Of the Tides and Courses of the Streams.

AT *Cape de Hague* by the shore, a South and by East Moon maketh high water.

In the Race of *Blackert* a North and by East, and South and by West Moon. The Flood falleth through the Race Northeast, and the Ebb Southwest.

In the Islands also a North and by East, and South and by West Moon maketh a full Sea, Men cannot well reckon the Tides there: because they have divers Courses about the Islands, but for the most part Northeast and by North. A quarter of the Tide, the Flood falleth thwart into the *Caskets*.

In *Garnsey* a North and by East, and South and by West Moon maketh full Sea.

At *Concalle* and *Granville* a West Northwest Moon.

At *S, Maloes* an East and West Moon maketh high water. The Flood falleth in there at the Western Channel, and goeth out again at the Eastern Channel; Men must reckon there upon when they will Sail into these Channels.

From the Island *Briack* in the Bay of *Benit*, the Flood falleth Southeast, but in the fair way East Southeast, and West Northwest.

At the East side of the Island *Briack* in the Road South South E. An East and West Moon maketh there the highest water.

Betwixt

The Coast of Britanny, from

Betwixt the Island *Briack* and *Garnsey*, a West South w. Moon maketh full Sea, the Flood runneth there East South E. and the Ebb West North w.

On the Coast, and within the *Caskets*, the Tide runs continually against the Sun, so that it is there never still water.

Betwixt *Sept Isles*, or the Seven Islands, and *Garnsey* in the fair way, a West South w. Moon maketh full Sea.

Betwixt *Briack* and the Seven Islands, an East and by North, and W. and by South Moon maketh full Sea. The Flood filleth there E. and E. and by South.

Betwixt the Seven Island and the outer Rocks of *Morlions*, the Flood falleth in South E. within the *Triacle Pots* towards the *Green-Island*, but in the fair way in the *Offing*, East, and E. and by North.

At *Morlaix* and *S. Pauls* a W. and by South Moon maketh the highest water : but in the fair way in the *Offing* thwart of it, a South w. and by W. and W. South w. Moon.

At the *Isle de Bas* maketh high water a West and by South Moon.

In the fair way there in the *Offing*, the Flood falleth East Northeast, and the Ebb West Southwest ; and so likewise from thence all along the Coast of *Brittaign*, unto the *Fourn* or *Ushant*.

At *Abberwrack*, an East Northeast, and West Southwest Moon maketh full Sea, without *Ushant* a West Southwest, and East Northeast Moon, and within the Trade a Southwest and by West Moon maketh full Sea.



*Of the Depths about these places, and in what
Depths Men may see the Land.*

UPon *Cape de Hague* standeth a Castle, with a little Turret; a little to the Eastwards of it in the Land standeth a sharp Tower. Two Leagues to the Eastwards of it lyeth *Sherbrough* with a flat Steeple.

The Island *Ornay* is upon the West end high with a steep going down Point: the East end is hilly, or with Hommocks, but lower than the West end; in Sailing by it, Men may see upon it a Tower or two with some Mills. Upon the North side of the Island lyeth a white Hill like a Sand-Hill.

To the Northwards of the *Caskets*, two Leagues from Land is deep 35 and 40 Fathom.

Betwixt the *Caskets* and *Garnsey* is 35 and 40 Fathom deep, most all stony Ground.

Northwest about 4 Leagues from *Garnsey* is a Pit where it is 80 or 90 Fathom deep; else it is thereabouts 40 Fathom.

Betwixt *Ornay* and *Jarsey* is deep 20 and 25 Fathom.

In the fair way of *Jarsey*, *Rockdove*, and the Island *Briack*, it is deep 20 and 30 Fathom.

About the *Triacle-pots* along the Coast it is 45 and 50 Fathom deep, in such depths Men may see the Land thereabouts.

By Night it is not good to come nearer that Coast, and the seven Islands than in 45 Fathom.

Thwart of *S. Paul de Lion*, and the *Isle de Bas*, 5 Leagues from the Land it is deep 45 and 50 Fathom.

Thwart of *Abberwrack* 5 Leagues from the Land, it is deep 50 and 55 Fathom.

The *Backovens*, or the Land of the *Fourn*, Men may see in 50 Fathom.

Ushant being about South from you, you may see in 50 Fathom.

The Coast of Britanny, &c.

For to know the Courses and Distances from place to place. See the Pilots Sea-Mirroure, in pag. 30, 31.

Of the Latitudes.

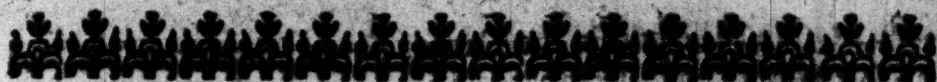
The Caskets lie in
The 7 Islands, or Sept Isles
Ushant lyeth in

49 deg. 49 min.
49 deg.
48 deg. 30 min.

How these Lands do shew themselves at Sea.



Thus sheweth Garnsey, when it is thwart
from you about 4 Leagues.



VII DEMONSTRATION,

Wherein

*Are Delineated the Coasts of England,
from Beachy to Port-land.*

TO the Westwards of the Point of *Beachy*, thwart of the West end of the 7 *Cleaves*, right against the Chindle, where Men run along by into *New-haven*, Men may also Ankor in 7, 8, or 9 Fathom.

A League and a half to the Eastwards of the Point of *Beachy*, nearest East Northeast from the Point lyeth a little Sand, upon which there is at low water and Spring tides scarce 2 Fathom.

At the West end of the *Seven Cleaves* lyeth the River of *Cuckmer-haven*, or *New-haven*, which hath two entries, the *New-westerm* entry lyeth in by the West Land, but is not to be *hauen*. used, but only with very small Shipping; It falleth altogether dry, the *Eastermost* is commonly the best, and lyeth Northwest and by West in; there is at high water with a common Tide no more than 7, and with a Spring-tide 14 or 15 Foot water; within, the Ships lie every Tide drie: But before the Village they remain a float; there they moor with 4 Cables fast on two green Shores. Upon these entries Men cannot well make any reckoning, they keep no certain depth, when it bloweth a Storm out of the South, they are oftentimes cast too with a Chindle, and opened again with a freshut.

Shorum is a Tide-haven, where is at high water and Spring tides 18 Foot water; but at low water, there remaineth no more than 3 Foot water, so that then it floweth 15 Foot up and down. With a common Tide at high water there is 12 Foot, and at low water 3 Foot depth. The Town *Shorum* lyeth a little

The Coasts of England,

little English Mile within the Haven, Ships (that draw but 8 or 9 Foot water) can lie afloat a little beneath the town at low water, or else they lie dry every where.

When you come from the Eastwards from *Beachy* or *New-haven* along by the shore, you may see open into the Haven, before you come thwart of it: But coming from the Westward, you shall not see it open before you come right before it, because the West Point lyeth somewhat further out than the East Point. From the West Point runneth off a little Tail, but at high water you may run in along over it, otherwise you must run in by the East shore. Upon the East Point stand 2 Beacons, which you must bring one in the other, and run in so right with them until you come by the North shore, and then in along by the fore-said North shore.

At *Shorum* sometimes there are builded many great Ships of 300 or 400 Tuns.

Arundel About 6 Leagues to the Westwards of *New-haven* lyeth *Arundel*, a Tide-haven, where a Ship may go in at half Flood; you must go in there by the West Land Northeast. In the entry it is 2, and betwixt the two Lands 3 Fathom deep at high water: But within the Haven remaineth at low water 4 and 5 Fathom; there you must Ankor before the Village.

Owers. Five Leagues West South w. from *Arundel*, and 13 Leagues West and by South somewhat westerly from *Beachy*, lie the Banks or shoalds of the *Owers* under water, a great League and a half a Sea-board the Land.

East-brough-head. About 2 Leagues East Northeast somewhat Easterly from the South side of the *Owers*, and a little Leagues South from *Arundel*, lyeth a shoald of Rocks and Chindles, called *East-brough-head*, as great as an Acre of Land, which falleth (at low water and Spring-tides dry) otherwise it cometh not above water; close to it, it is 15 Fathom deep. They that Sail off from the Haven of *Shorum*, and are bound to the Westwards, must not go more westerly than South Southwest, until they come in 12 Fathom, before they set their Course more westerly, for fear of this shoald. About an English Mile N. W. from this foresaid shoald lyeth also a sunken Rock, whereupon at low water it is no more than 5 or 6 Foot water. About.

From Beachy to Port-land.

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About half ways betwixt *Arundel* and *Selfey*, runneth off a Ledge of Rocks thwart to the Southwards from the Shore, about an English Mile and a half into the Sea, called the *Boggers*, whereof some of the Rocks fall dry at low water, but the outermost are always under water.

The shoalds or Banks of the *Owers*, lie about 4 Leagues to the Eastwards of *Wight*, and lie off a League and a halt from the Land; thwart of them standeth a Tower in the Land, when that is North Northwest from you, then are you thwart of the Southermost part of the Shoald; and if you keep the *Culver-cliff* of *Wight* West and by North, and West Northwest from you, coming either from the East or from the West, you can take no hurt of the *Owers*, you may run along by them in 12 Fathom upon your Lead, without danger. If you Sail away from the E. end of *Wight*, E. and by N. and E. N. East. you shall run in 12 Fathom along over the East end of them. He that is there well acquainted, may also Sail to the Northwards of them, through between the Land and the *Owers*.

Betwixt the *Owers* and *Portsmouth* goeth a great Sound or Haven; within lyeth the Town of *Chichester*.

On both sides of the Island *Wight* Men may Sail within it, and there come to Ankor either under *S. Ellens*, or before *Newport* where they will.

For to Sail into the Eastwards of *Wight*, you must bring the Eastern Castle that lyeth to the Eastwards of *Portsmouth*, over the *Lime-kiln* (that is, a white spot in the Land to the Northwards of that Castle,) and keep them so one over the other, until that the *Culver-cliff* come within, or under the N E Point of *Wight*. Then bring the *Lime-kiln* over the East end of *Portsmouth*, and keep them so until that the foresaid Castle to the W. wards of *Portsmouth* come to the wood: thus doing, you shall come near neither Plate nor Sand to take any hurt of them, and you shall come so by little and little before *St. Eliens Church*. When the Church cometh two Ships lengths within the red Point, then you shall not come too near the Riff at the Point. Or else if you cannot see the *Lime-kiln*, then keep the Castle to the Westwards of the *Culver-Ciffe*, until.

The Coasts of England,

until that *St. Ellens* Church cometh a Ships length without the Point of the Island; go then boldly Northwest in, and you shall not come too near the Riff; and then bring the square Tower betwixt the East end of *Portsmouth*, and the Castle: when the Castle to the Westwards of *Portsmouth* cometh to the East side of the wood, then you shall not (as here before is said) neither come too near either the Plate or the Sand, to take any hurt of them.

*Marks of
the Plate.*

When the Eastermost white spot standeth a Ships length to the Westwards of the Castle, then you are to the Eastwards of the Riff, and when the Culver-cliff is covered or hidden behind the Northeast Point of the Island, then are you also within the Riff. The Marks of the little Plate are these; there standeth a square Tower within the Land, and a Castle on the water side to the Eastwards of *Portsmouth*; thwart from it lyeth the foresaid Lime-kiln; when that cometh to the Eastwards of the foresaid Castle, so that you may even see through betwixt them both, then are you upon the little Plate, which at low water is not deeper than 10 Foot; then standeth the Castle to the Westwards of *Portsmouth* at the west side of the Wood. But when the foresaid square Tower cometh to the west side of the foot of the Castle, and the Castle by west *Portsmouth* to the west side of the Wood; there it is deep at low water upon the little Plat 12 Foot.

When the square Tower standeth betwixt the East end of *Portsmouth*, and the Castle even betwixt the Lime-pit and the Tower, and the Castle by west *Portsmouth* in the west side of the Wood; there it is at high water 10 Fathom deep.

When *St. Ellens* Church lyeth Southwest and by west from you, then lyeth the Southeast end of the Plate Northeast and by North from you, and the west end North and by East.

*No mans
Land.*

From the Point of the Road *Newport* Eastwards lyeth a broad Sand along the Shoald, called *No mans Land*, which falleth almost dry at low water; it is so steep, that half a Cables length off from it, it is 12 Fathom deep: upon the high Land of *Wight* thereabouts stand 2 or 3 Mills. If you come near the Shore, that the foresaid Mills be hidden behind the foresaid high

From Beachy to Port-land.

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high Land, you shall not misse to come aground against that foresaid Sand; but so long as you can see these Mills, you shall go clear of it.

The Road of the *Cows* is the best Road in *Wight*. Over against, betwixt that and *Calshot* Castle, lyeth a hard Sand nearest the North Shore, lying from thence to the westwards along the fair way, almost so far as thwart of *Newton* called the *Brambles*; at low water and Spring-tides it falleth almost dry, *The Bram-* and then the Sea breaketh much upon it: to the Northwards of *bles*. it goeth also a Channel through, but it is not to be used, but with small Ships.

For to Sail in at the west end of *Wight*, you must run right in with the *Needles*; (they are high sharp Rocks as *Masts* lying *For to Sail in at the* at the west end of *Wight*;) bring then the innermost Point of *Needles-Wight*, or the Castle that standeth upon the Chindle over against that Point, called *Hus* Castle a little without, or to the Northwards of the *Needles*, Sail in there upon, until you come to the *Needles*; leave them then on the Starboard side of you, and run in within a Cables length along by them for to avoid the Banks which lie off from the Chindle to the Northwards of the *Needles*, of the west end of *Wight* almost to the *Needles*. Betwixt the Banks called the *Swingels* and the *Needles* it is not very broad, and at low water 5 Fathom deep. When you Sail in here, you must cast your Tides well. The Fore-flood falleth strong upon the Banks; when you are then come within the *Needles*, then edge a little more off from the Shore unto *Hus* Castle that standeth upon the Chindle, for to avoid some Rocks which lie along by the Island under water. Being come within the Castle or Chindle, there it is wide and broad, leave two third parts of the Channel on the Larboard side; and one third part on the Starboard side; Sail so in until you come before the Village of *Newton*, and Ankor there in 9 or 10 Fathom, or else Sail forth (if you will) about the Point of the *Coves*, and Ankor there before the Haven of *Newport* in 10 or 12 Fathom, there is the best Road, and best lying of all the Roads in *Wight*. The Haven or Road before *Newport* lyeth from the foresaid *Hus* Castle upon the Chindle N. east and by East, and East N. east about 2 Leagues asunder.

From

The coasts of England,

Peverel-
point.

Sandwich
Bay.

From the *Needles of Wight* West and by South about 3 Leagues, lyeth the Point of *St. Albans Land*, called *Peverel Point*; from it lie off some little Rocks to the Eastwards. A little to the Northwards of that Point is a Bay, called the Bay of *Sandwich*; there is a good Road for them that are bound to the Westwards; If you will go to ride there coming from the Westwards, you may take the sounding of *S. Albans Land*, and run aboard the Point in 4 or 5 Fathom at a half Flood, and you shall take no hurt of those little Rocks. Being gotten about the Point, edge by it up to the Westwards towards *Sandwich*. A little to the Northwards of *Sandwich* in the Bay, lyeth a round *Hammock*, and thwart of it somewhat within the Land standeth a Mill; bring that Mill to the South side of the round *Hammock*, and Sail so in until you come in 4 or 3 Fathom, and Ankor there so deep or shoaldy as you will; there it is good lying for Southwest winds.

Handfast-
point.

Studland.

Pool.

A little League North and by East from the foresaid Point, right West from the *Needles of Wight*, lyeth another Point, called *Handfast point*; to the Northwards of it lyeth a little Town called *Studland*, before it is also a good Road. Upon the outermost part of that Point, is a hole through the Land, where Men may see through, and a little without the Point standeth a high steep Rock like a Mast, almost like the *Needle* at the West end of *Wight*. For to come to ride before *Studland*; you must sail about the second Point, with the hole or the steep Rock, in 4 or 5 Fathom, and go in West Northwest towards *Studland*. *Studland*: a little to the Southwards of it lyeth a little Valley, bring that West southwest from you, and go towards the shore, in 4 or 3 Fathom and a half there is the best Road; and lying there, you may see the foresaid hole in the Point.

A League to the Northwards of that foresaid Point with the hole, lyeth the Haven of *Pool*; for to Sail in there, coming about the foresaid second Point with the steep Rock, you must go on Northwest, or somewhat more Northerly, and then you shall see right a Head of you a high flat Hill, which standeth higher than any other Land thereabouts, keep that betwixt the two shores, and run in so right with it. If you must turn to
and

From Beachy to Port-land.

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and again, then spare not to use your Lead, and run not further over to the Westwards, than that the flat Hill come to the west Land, so soon as it beginneth (as it were) to touch it, you must cast about, or else you should be fast aground; and after you have cast about, run not further over to the Eastwards, than that the foresaid high flat Hill cometh even to the East Sand-hill, which is a high, gray, sharp sandy Hill, lying at the East side. If you keep these foresaid Marks in this manner, you shall have there going in at half Flood water enough; there remaineth upon the shoaldest at low water 10 and 11 Foot, but it floweth there no more than 5 Foot up and down. It floweth there twice in a Tide. A Southeast and Northwest Moon maketh there full Sea: also, a South and by East, and North and by West Moon once more; that cometh to pass by reason of the fore-ebb that cometh out of *Wight*. When you come within the entry, go then N. Northeast on, and keep the Beacons that stand on the East Land on the Star-board from you, and run indifferent close along by them. The Shores are on both sides steep, and the Channel is not wide; without the Channel it is shoal or flat. This is Pilots water.

From the West end of *Wight* to the Point of *Portland*, the Course is West Southwest 11 Leagues: but from *Dunrose*, *Portland*, the Southwest Point of *Wight*, West and by South thirteen Leagues.

If you will go to Ankor under *Portland*, (coming from the West,) then come within 2 Cables length, or a shot of a cast Road under Piece about the Point of *Portland*, and being come about the Portland second Point, edge up to the Westwards until you come before the Castle, and Ankor there in 7, 8, 9, 10, or 11 Fathom, so that the Point of *Portland* do lie South and by East, and South Southeast from you, there you shall lie Land-lockt for a South, and South and by East wind. With a Southwest, and South Southwest wind, Men must be very mindful of terrible rippling of the Race of *Portland*, which beginneth a little to the Westwards of *Portland*, and endeth a little to the Westwards of *St. Albans*. The Ground in that Race is very uneven, and shoaly, sometimes 7, otherwhiles 10, and also 15 Fathom deep.

N

About

The Coasts of England,

About a League to the Northwards of the Road of *Port-land* lyeth a little Town called *Waymouth*, with a Tide-haven; before it Men may Ankor in 4 or 5 Fathom.



Of the Tides and Courses of the Streams.

AT *Beachy* by the shore before the 7 *Cleaves*, the Flood falleth East and by South, and the Ebb W. and by North.

From *Wight* to *Beachy* East and by North, and West and by South thwart of *Wight*, before *Dunnose*, a South and by East Moon makes full Sea.

At *St. Ellens*, and the *Cowes* a South Southeast Moon.

At *Hampton* at the *Kay* a South and North Moon.

Within the *Needles* of *Wight* a Southeast and by South Moon.

Before the Haven of *Pool*, a Southeast and Northwest Moon maketh high water: also a South and by East, and by West.

Thwart of *Portland* in the Channel, a South Southeast, and North Northwest Moon.

From *Portland* to *Wight*, the Flood falleth East and by North, and the Ebb West and by South.



Of the Depths.

VWithouth *Beachy* thwart of the *Seven Cleaves*, it is deep 28 and 30 Fathom.

In the *Offing* thwart of *Wight*, it is deep 38 Fathom; in such depth Men may see the Land.

In the Channel betwixt *Portland* and the *Caskets* it is 40 Fathom deep; when it is clear weather, Men may see the Land on both sides: the nearer *England* the shallower, towards the *Caskets* it is deepest.

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For to know the Courses and Distances from place to place. See the Pilots Sea-Mirrou, in pag. 32, 33.

Of the Latitudes.

Dunhoose the Southermost Point of Wight
lyeth in 50 degr. 36 min.
Portland lyeth in 50 degr. 26 min.

Thus sheweth the Island Wight, when you Sail along by it, being 3 or 4 Leagues a Sea-board the Land.



A



III

Thus sheweth Beachy with the Seven Cleeves, when you come from the West, and Sail along by it.



How these Lands do shew themselves at Sea



*Thus sheweth Portland when you come
from the Westwards.*



*Thus sheweth Portland when it is North and
by West from you 6 Leagues off.*



*Thus sheweth Portland, when you come
from the Eastwards.*

Portland.

*Thus sheweth S. Albans Land, with Portland, to the Westwards of it, when you
Sail along by it, being to the Eastwards of Portland.*



VIII DEMONSTRATION,

Wherein

*Are shewed the Coasts of England,
From Portland to the Lizard.*

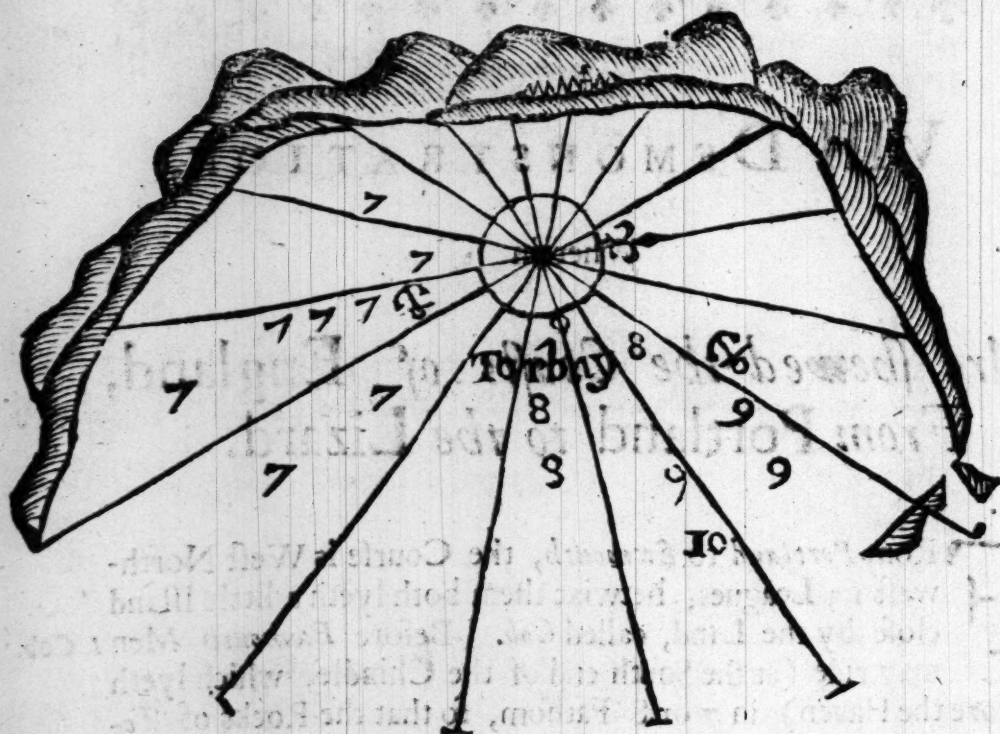
From *Portland* to *Exmouth*, the Course is West North-west 13 Leagues; betwixt them both lyeth a little Island close by the Land, called *Cob*. Before *Exmouth* Men *i. Cob*. may ride (at the South end of the Chindle, which lyeth before the Haven) in 7 or 8 Fathom, so that the Rocks of *Tomanstones* do come to lie South, and South and by East from you, there it is good Ground, and Land-lockt for a South wind.

Five Leagues South, and S. and by W. from *Exmouth* lyeth *Torbay*, and lyeth from *Portland* West, and W. and by South, *TORBAT.* distant 13 Leagues.

T O R B A Y.

The Coasts of England.

T O R B A Y.



For to go into the Road of *Torbay*, you must bring the West Point South and by East, and South Southeast from you, and Anchor there in 7 or 8 Fathom, you shall lie Land-lockt for South and Southwest winds. At the Northeast side of the Bay is also a Tide-haven before it; it is good Anchor Ground in 4 or 5 Fathom, according as you will lie near or far from the Shore.

Dartmouth.

Three or four Leagues Southwards, or to the Westwards of *Torbay*, lyeth the Haven of *Dartmouth*, which hath a narrow entry, lying in betwixt 2 high Lands; upon each side of the Haven standeth a little Castle, in time of Wars they were wont to shut it over with a Chain; on the West side standeth a little Church on the high Land. For to Sail in there coming from

from the *Steart* or from the Westwards, you must run in along by the Wester-land, so far to the Eastwards, until you bring the *Kay* of the Village (that lyeth on the East side of the Haven) in the midst of the entry of the Haven, and Sail so in, keeping the midst of the Haven betwixt the two Lands; and you must be very ready with the Boat (if there should come any fore slangs from the high Land) for to row in. Being come in, edge over to the West side, before the Brew-house, and Ankor there in 10 or 12 Fathom, or before the Village on the East side where you please.

At the East side of the Range lyeth a sunken Rock; the Marks to avoid it are these. To the Eastwards of *Dartmouth* is a red Point, which below by the water is black, and in the red lyeth a white Stone; when the white Stone cometh over the black Point, then are you thwart of the sunken Rock; but if you see the *Kay* of the Village, and do as before is said, then you shall not come too near that sunken Rock to take any hurt of it.

Betwixt *Dartmouth* and the *Steart*, nearest to *Dartmouth*, standeth a Spire Steeple indifferently high and white, called *Tackman*; that is a very good mark to know the Haven of *Dartmouth* by.

The *Steart* lyeth from *Dartmouth* Southwest, distant three Leagues. Under the Point of the *Steart*, at the East side is a good Road for Westerly winds: betwixt the little Church that standeth upon the high Land, and the Point of the *Steart* in 10 or 11 Fathom, so that the Point lyeth Southwest from you.

A little to the Eastwards of the Westermost Point of the *Steart* lyeth a Haven, called *Salkow*, when you come from the West, it sheweth it self open; the West side of it is ragged, and the East side of it goeth sloping down; close to the West Point lyeth a Rock, or a ran of Rocks, therefore you must give it a good birth, and leave the Rocks on the Larboard-side: Further, you may see all breaks that can do you hurt. Being come within the Point, you can take no hurt of either of both Shores. Upon the Bar or Shoals of the entry, remaineth at low water with a Spring-Tide, not less than 11 Foot water, and again within, it is at least 3 Fathom deep.

Sumr.

Salkow.

Plimouth.

Mewstone.

Seven

The Coasts of England,

Seven Leagues to the Westwards of the *Stear* lyeth the Sound of *Plimouth*, at the outermost East Point of the Sound *Mewstone*. lyeth a high round Rock called *Mewstone*; the West Point is called *Ramhead*, betwixt them both goeth in the Sound of *Plimouth* North Northeast in, it is broad and deep. A little to the Northwards of *Ramhead* is a fair Sand-Bay, where Men may Ankor close under the Land in 9 and 10 Fathom. Two Leagues South a little Easterly from *Ramhead*, lyeth a Rock above water called *Eddystone*. The Point of *Plimouth* lyeth from the *Eddystone* North and by East, and North Northeast, distant about 4 Leagues. In the Sound, by the Land of *Plimouth*, lyeth a little Island, which is fast to the West side with a Riff or Ran of Rocks under water, so that Men may Sail along *Catwater*. to the Eastwards of it, whether they be bound to *Catwater*, or into *Hampse* the West Harbour. If you will go into *Catwater*, then run in betwixt the Island and the Point on the East side, in with the Land of *Plimouth*, until you see *Catwater* open on the Starboard-side of you; go then into the Eastwards betwixt the Point of *Plimouth*, and the foresaid East Point on the Star-board side of you, leaving the most part of the Channel on the Starboard side of you, until you come within the Point, and Ankor there right against that high steep Norther-land; there is at low water with an ordinary Tide 4 and 5 Fathom deep.

When you Sail into *Catwater*, you must take heed, and give a good birth to the Southern Point of the entry of *Catwater*; for there lie off to the foresaid Point, a ledge of Rocks under water, near about 2 Cables length from the Land, and upon the Point of the ledge or shoald lyeth a Buoy, where is at half Flood about 12 Foot water, which Buoy you must leave on your Starboard side in going into *Catwater*; and when you have *Catwater* altogether open, you may run into the Eastwards, leaving (in the entry of the Harbour) two third parts of the Channel on the Starboard side, as before is said, because the South shore is somewhat off, there lying a flat sandy Bank, which reacheth to the second Point of the South shore of *Catwater*.

A little to the Eastwards of that foresaid little Island, lyeth a Rock under water, upon which is at low water not deeper than

two Fathom. For to Sail within the Island, you may go in to the Eastwards, or to the Westwards of the Rock according as occasion shall serve. If you will Sail into *Hamoase*, to the Westwards of the Rock, then take the Sounding of the Island in 4 or 5 Fathom at low water, and run in so by it, until that the Fisher Village (lying to the Northwards a little within the Land) come in the West side of the Valley on the North shore, then are you to run through between the Island and the Rock, and to the Westwards of the Rock. Within the Island upon the Land of *Plimouth*, standeth a Wall or Hedge, when as you see that an ending, and the Chappel of the foresaid Fisher Village cometh to the North side of the Valley, and *Catwater* cometh open, then do you run over the Rock. Between the Island and the Main, Men may Ankor in 12 or 13 Fathom.

If you be bound into *Hamoase*, you must run in between the Island and the Land of *Plimouth*, and then in the midst of the Channel between the two Lands, until that the entry of *Hamoase* be open; run then into the Northwards, as the Channel leadeth, until you come in about the West Point, and Ankor there in 16, 15 and 12, or 10 Fathom. In the narrow, it is 15, 16, 17, and also 20 Fathom deep; and between the Island and the Main, 8, 9, 10, and 12 Fathom.

About half a Cables length to the Eastwards of the passage way going into *Hamoase*, lyeth a sunken Rock under water, called the *German*, about two great Ships length from the shore, and at low water hath not above 4 Foot water upon it. And when Men do come any thing near this foresaid sunken Rock going into *Hamoase*, either with the Flood or the Ebb, the Tide will set them right upon it, if it be calm. Therefore to avoid it, Men must (with calm weather) give this foresaid sunken Rock a good birth, until they bring the Houses of the Fisher-Village, (called the *Stone-house*) open of the Easter Point of the Passage way, and then run over towards the North shore, until they have hidden the Island in the foresaid Eastern Point of the Passage way, for to avoid a sunken Rock that lyeth off to the Eastwards from the North Point of the *Beach* on the West side of the Passage way, a halt Cables length off, then run amidst

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the Channel into *Hamoase*. Upon this foresaid sunken Rock at low water, is not above 3 or 4 Foot water.

*Sunken
Rocks.*

In the Sound of *Plimouth*, not far to the Northwards of the *Mewstone*, lie 2 or 3 sunken Rocks, upon which remaineth at low water, not more than 3 or 4 Fathom water, the Marks of them are these; to the Eastwards of *Plimouth* standeth a Tower with a Mill, and to the W. wards of the foresaid little Island standeth a Gentlemans House; when the little Tower or Turret of that House cometh over the Point on the W. side of the Island, and the foresaid Tower and Mill to the Eastwards of *Plimouth* come one over the other, then are you upon the innermost sunken Rock or Shoald, which is at low water 4 Fathom deep. But when the Point of *Hamoase* cometh even without the Point to the Westwards of the Island, and the foresaid Tower and Mill also one in the other, then are you upon the outermost Rock, where it is at low water and Spring-tide 3 Fathom and a half deep.

*Louw-
Island.*

From *Ramhead* West and by South 5 Leagues, lyeth *Foy*, and betwixt them on the Coast lyeth a little Island, a little to the Eastwards of a Point, called *Talland-point*, thwart of *West-Louw* called *Louw-Island*; you may Ankor there to the Eastwards of the Island in 5 or 6 Fathom.

Foy.

Foy is a broad Haven, where a Ship may go in at a half Flood; at the East side of the Haven standeth a little Church, with a little Steeple, and on the West side a white Church, somewhat greater than that upon the East land, with a square Steeple at the West end of it.

For to Sail into *Foy*, you must have at least a half Flood, and run in amidst the Channel betwixt the two Points; and being come within, then choose which side you will, but the most water is by the West Land, between the Stakes and the Tower that standeth upon the West Land. Being come within the Stakes (as you come in by the West Land) then bear somewhat off presently from the West shore, almost into the middle of the Channel, nearest to the West Shore, until you come before the Village that lyeth on the West side, there is a deep Dock, where a Ship that draweth 16 Foot water may lie afloat at low water. In that Dock may or ; Ships lie.

If

If (when you come in by the East Land) you desire to be in the foresaid Dock or Pool; then Sail in until you come within the Stakes, and then edge over off from the East Land, until you come nearest the West Land, for to avoid a Flat, which lyeth by the East shore along the Haven, and beginneth against the first House of the West-Village. If it should happen, that you could not lead it in with a Sail, then let your Ankor fall without the Stakes, and warp in with Hawfers, until you come into the foresaid Pool.

You may also Sail so far in, that you may see a wall on the West side of the Haven, where lyeth a Village behind it. A Ships length to the Southwards of that wall, it is good lying by the East Land, being moored by 4 Cables; there may also a Ship ride afloat that draweth 16 Foot water. You may also Sail further in along by that *Swach* that lyeth on the West side, wherein the Mill standeth; but come not too near the North Point of the *Swach*, for there by it lyeth a Rock under water; being past that, you may Moor your Ship in the midst of the Channel, there is best lying for Ships that draw much water.

Four Leagues Southwest and by West from *Foy*, lyeth the Point of *Dodman*; and two Leagues to the Westwards of it lyeth the Haven of *Falmouth*. The Point of *Dodman* is double *Dodman*. Land with a round Hill, which to the Westwards goeth sloaping down, somewhat towards the West end standeth a Mill with a sharp Tower, and some little Houses upon the Land, somewhat to the Westwards, Men may see the Castle of *Falmouth* upon a round Hommock against the high Land. This Land is very easie to be known when you come from the West, or from the *Lizard*.

Upon the West Point of the Haven of *Falmouth* standeth a *Falmouth*. Castle upon the high Land; and in the entry nearest the West side, lyeth a great Rock above water, you may Sail about it on both sides; at the inner side of the East Point lie also some Rocks off from the Shore. For to Sail in there to the Eastwards along by the foresaid Rock, you must run in within two Cables lengths along by the East Land leaving the foresaid Rocks on

The Coasts of England,

the Starboard side, and the great Rock on the Larboard side, and so Sail right in with the high Land that lyeth on the West side within the Haven. Within in the Haven standeth on the Land a white Chalky spot, also a little Wood of Trees; keep them over the North Point of the foresaid high West Land, and Sail so right in with them, keeping them so until you come near them, you shall find so at half Flood upon the Shoaldest, not less water than 5 Fathom, and that betwixt the foresaid Castle upon the West Point, and the Easter Castle that standeth on the East side within the Haven, over against it, or a little within the Castles. When you shall then come by that foresaid high W. Land, run along by it, unto the North end of the same, and Ankor there in 12, 13, or 14 Fathom. You may also from thence edge over towards the East Land, and Ankor there under or behind the Bank that lyeth off from the Eastern Castle along the middle of the Haven, in 6, 7, or 8 Fathom: the Bank falleth almost dry at low water, and is soft Ground, so that the Ships sit in the Oase, when they come there aground.

For to Sail into the Westwards of the foresaid great Rock, you must take the Sounding of the West Land, where the Castle standeth upon, in 5 or 6 Fathom; being somewhat within the Rock, run (as before is said) towards the West Land. To the Westwards of the Rock, it is in that Channel 6 and 7 Fathom deep at half Flood; but in the Channel to the Eastwards of the Rock, 7 and 8 Fathom.

Four Leagues South and by West from *Falmonth*, lyeth the East Point of the *Lizard*: betwixt them both lyeth a Haven called *Helford*, which is little used for Ships.

At the South side of the Haven lyeth a steep Point, and on the North side a low sharp Point. Within the Haven on the South side, standeth a Gentlemans House beneath at the Strand, and upon the Hill standeth a tuft of Trees, you must keep these one in the other, and run so amidst the Channel into the entry of the Haven. On the North side stand 2 or 3 Trees, these come a Masts length to the Westwards of a little House that standeth in a white Sandy Bay, thereupon you may Sail in also amidst the Channel; it is a short In-ler, being come within,
you

you may Ankor in 6 or 7 Fathom. Upon the South side standeth also a sharp Tower, and upon the North side a little Castle upon the steep Land.

The *Lizard* hath 3 Points; the Northermost is called *Black-head*, from that, to the second, the Coast lyeth Southwest and by West, and along to the third about W. Southwest, or W. and by South: from the second or middlemost Point, lie to the Seawards some Rocks a Cables length, or a Cables length and a half off, called the *Stags*.

To the Northwards of the Northermost, or Eastermost Point of the *Lizard*, betwixt *Helford* and the foresaid Point, lie some Rocks a great League off from the Land, called the *Man-nacles*, South and by East from the Harbour of *Falmouth*, and East Northeast from the foresaid *Black-head*, whereof many of them are above water at low water, and some of them at high water remain uncovered. Betwixt them and the Shore it is very fowl and Rocky, so that Men cannot run through betwixt them, without great danger.

He that cometh out of *Falmouth*, and is bound to the Westwards, must not go more Southerly with an Ebb, than South Southeast, or Southeast and by South according as the Wind shall be, for to run clear of these aforesaid.



Of the Tides and Courses of the Streams.

IN *Dartmouth* and *Torbay*, a West and by South Moon maketh full Sea.

Thwart of the *Stear* in the Channel, a West Northwest, and East Southeast Moon.

From the *Stear* to *Portland*, in the midst of the Channel, the Flood falleth East Northeast, and the Ebb West Southwest.

Thwart of *Dartmouth* by the Land, the Flood falleth Northeast and by North, and the Ebb Southwest and by South.

Thwart.

The Coasts of England,

Thwart of *Torbay* towards *Exmouth* in the Bay, the Flood falleth North Northeast, and the Ebb South Southwest.

In *Plimouth* and *Foy*, a West and by South, and East and by North Moon maketh the highest water.

Thwart of *Foy* in the Channel an East Southeast Moon.

A Sea-board off *Falmouth* an East and by South; but in the Haven of *Falmouth* an East and by North Moon.

At *Helford*, and at the *Lizard*, by the Land, an East Southeast, and West Northwest Moon maketh the highest water.

From *Ramhead* to the *Stear* by the Land, within the *Eddystone*, the Flood falleth East Southeast, and the Ebb West Northwest.

From *Dodman* to *Ramhead*, the Flood falleth East Northeast, and the Ebb West Southwest,

From the *Lizard* to *Dodman*, Northeast and Southwest.

In the Channel betwixt the *Lizard* and the *Stear*, thwart of *Foy*, the Flood falleth East and by North, and the Ebb West and by South



Of the Depths.

THe *Stear*, and the Land of *Dartmouth* Men may see them both in 45 Fathom.

When you have the high Land of *Plimouth* North from you, you may see it in 50 Fathom; it is high double Land, and sheweth it self first in two Hills. That same high double Land within the Land, you may see it from thwart of *Foy*, until you come thwart of *Dartmouth*.

The *Dodman* you may see in 42 Fathom off from the *Lizard*, to the *Stear*.

The *Lizard* you may see in 53 Fathom; there the Ground is white and red shelly Sand.



Of the Latitudes.

| | |
|---------------------------------------|------------------|
| The <i>Stear</i> lyeth in | 50 degr. 12 min. |
| Or as some will hold, more Northerly. | |
| <i>Torbay</i> lyeth in | 50 degr. 28 min. |
| The <i>Lizard</i> lyeth in | 50 degr. |

For to know the Courses and Distances from place to place. See the Pilots Sea-Mirroure, in pag. 32, 33.

How these Lands do shew themselves at Sea:



The Land betwixt Torbay and the Steart sheweth thus.



Thus sheweth the high Land to the Eastwards of Plymouth.

The Coasts of England, &c.

Lizard.

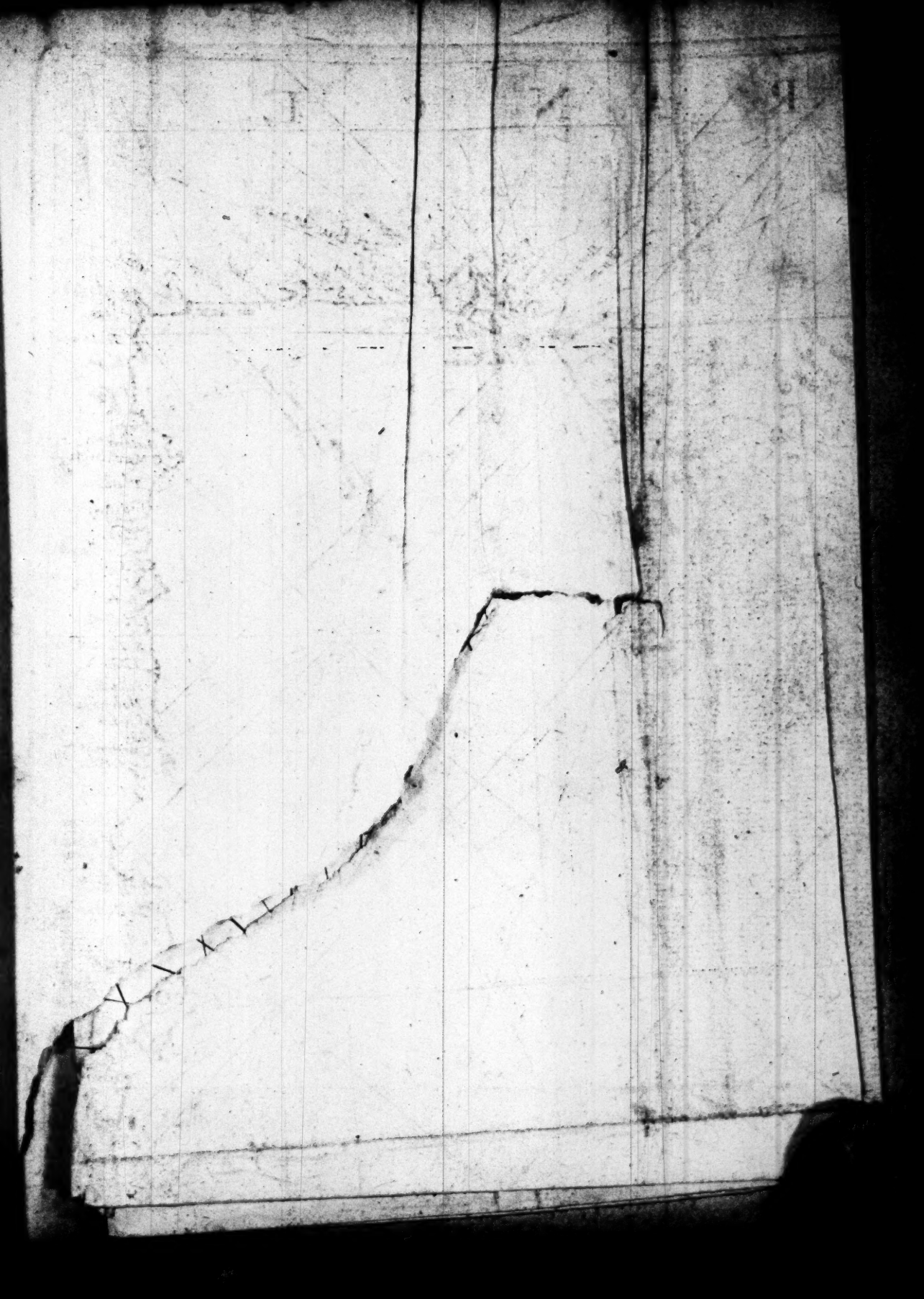
Falmouth.

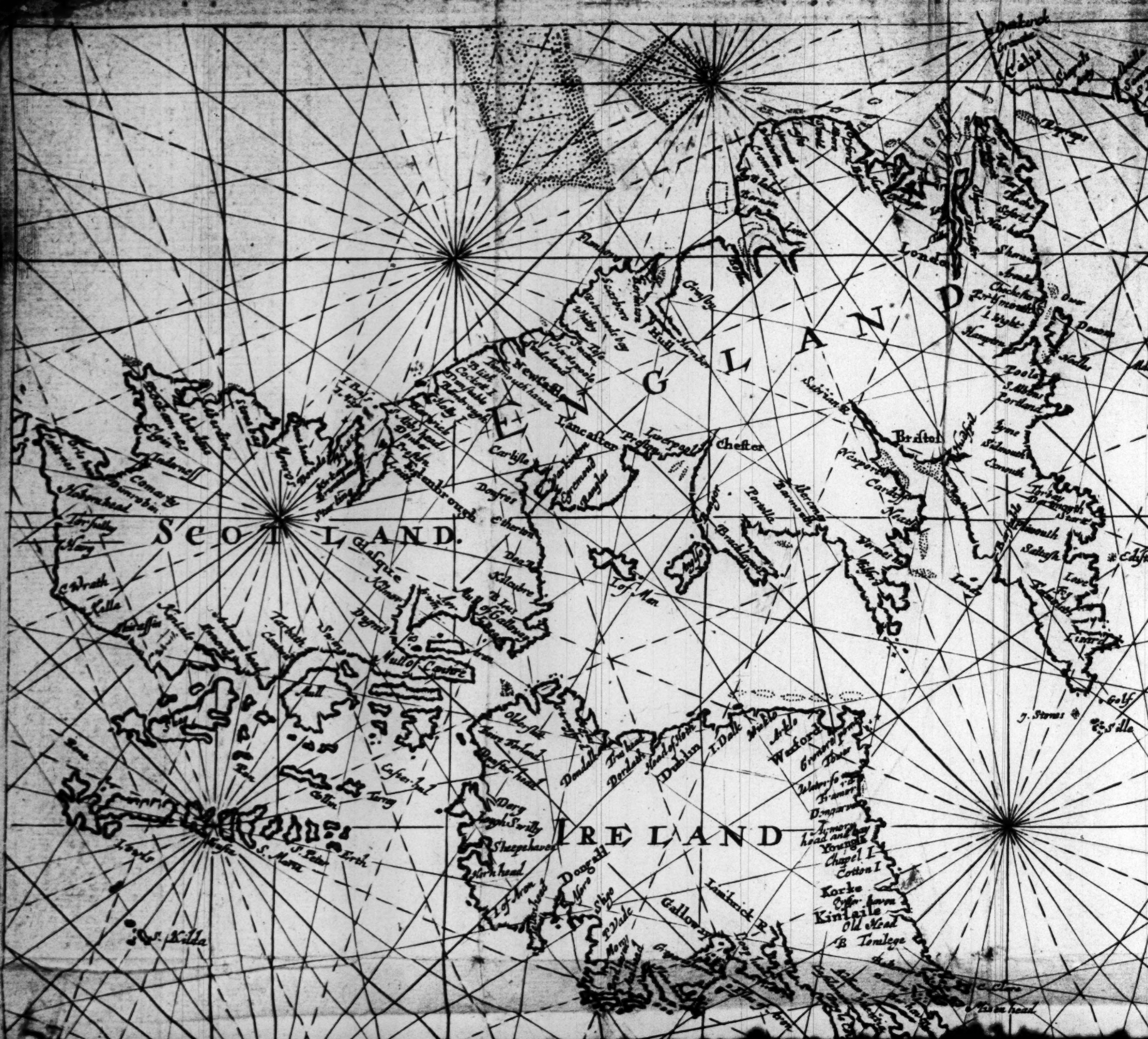
Dodman.

This sheweth the Land between the Dodman and the Lizard.



*This sheweth the Lizard, when you
Sail along by it.*







IX

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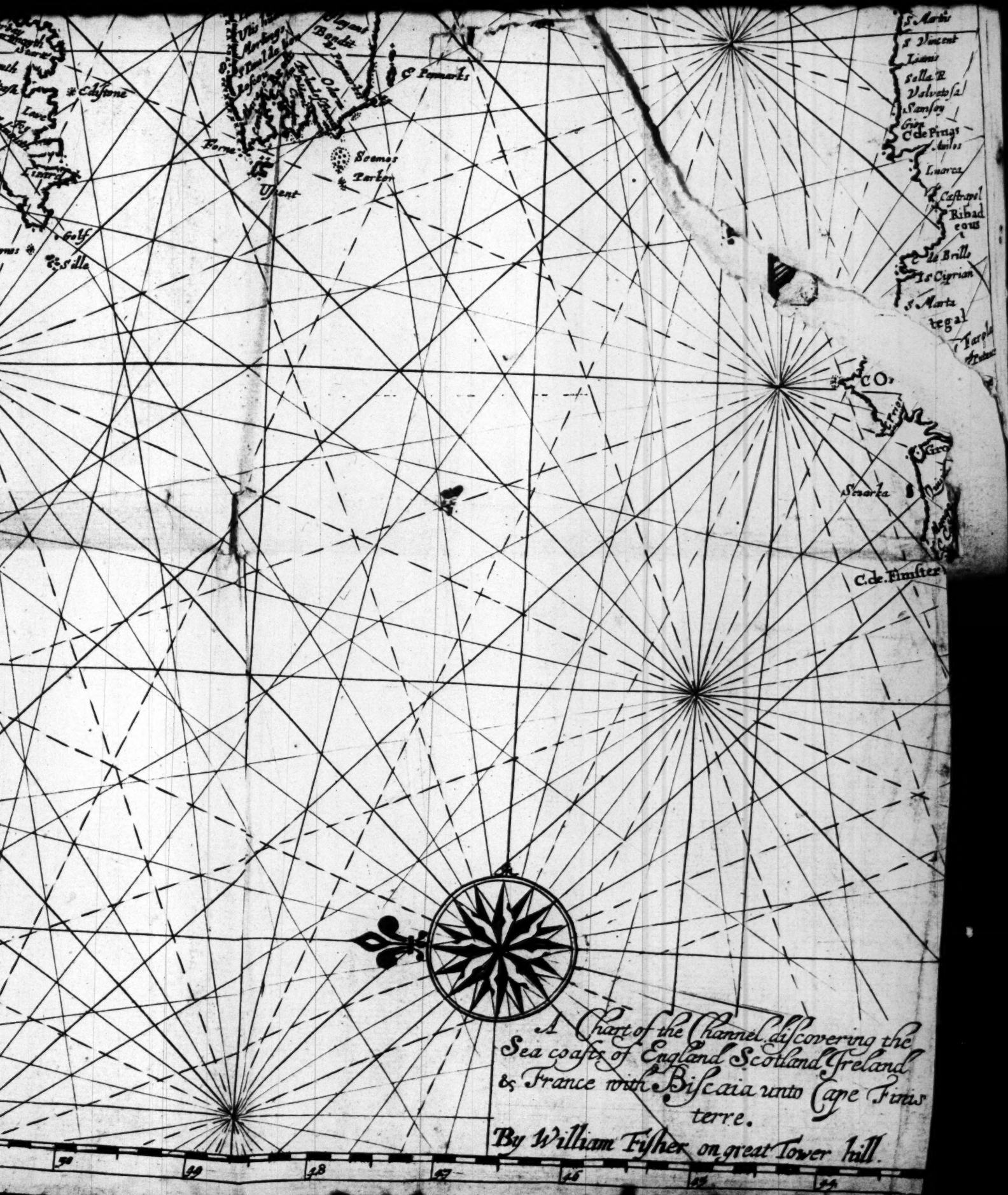
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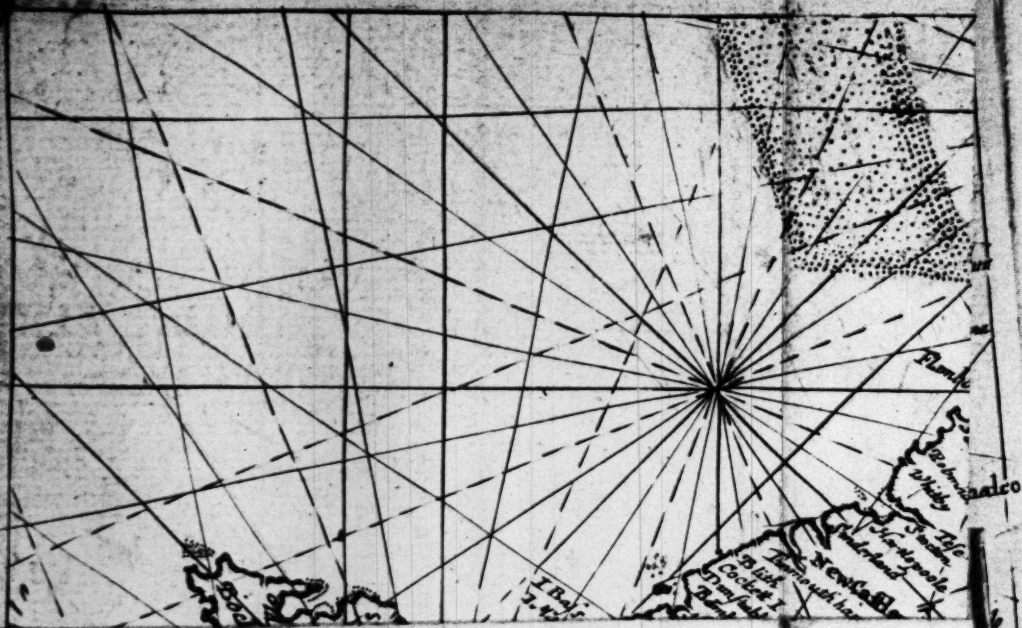
IRELAND

20 30 40 50 60

Scale of English Leagues

58 57 56 55 54 53 52 51





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IX DEMONSTRATION,

Wherein

Are delineated the Coasts of *Eng-land*, from the *Lizard*, and the *Lands-end*, to the *Cape of Cornwall*, the *Sorlings*, and the *Channel of Bristol*.

THe *Lizard* is a low Point, where some Rocks lie off it; from it; upon the South end of it standeth a Tower, and upon the high Land towards the North end standeth another Tower, which is sharp.

About 5 Leagues Northwest from the *Lizard*, lyeth a great Bay, called *Mounts-Bay*; at the West Point of this Bay lyeth a little Island, whereupon stand 2 little short Towers like Beacons; on the East side in the Bay lyeth another high little Island, whereupon standeth a Castle, called *St. Michael's Mount*; on the East side of this Bay lyeth a great ran of Rocks, which lie off into the Sea a League from the Land, whereof Men must take good heed in dark weather, from thence to the Southward towards the *Lizard*, the Coast is all along full of Rocks, but these lie not so far off from the Shore.

For to Sail into *Mounts-Bay*, coming from the *Lands-end*, or from the *Lizard*, and being to the Westwards of the said ran of Rocks, you must run in right with the little Island called *St. Michael's Mount*, so long, until you come within half a League of it, then edge up to the Westwards towards the Bay.

The Coast of England, from the Lizard,

Bay, until that you see the foresaid little Island, with the two little short Towers at the West Point, lie wait on the Larboard side, and run in close along to the Northwards of it, for it is very clean, but leave the Castle a great ways on the Starboard side, being fowl about it. Being come within the little Island at the West Point, you shall see within it a great Sandy Bay, Anchor there in 7 or 8 Fathom. East Southeast, and Southeast winds do blow there open in, for all other winds you lie there Land-lockt.

*Lands-end
of England*

Four Leagues to the Westwards of *Monsey Bay* lyeth the *Lands-end* of England, and lyeth from the *Lizard* West North-west, distant 9 or 10 Leagues. About a League Southeast from the *Lands-end*, and half a League without the Land, lyeth a sunken Rock, which at low water cometh above water. Thwart of that Rock standeth a Church upon the Land, when you can but even see that over the high Land, then are you thwart of the foresaid Rock, viz. even as far from the Land as the Rock, but when the Church is hidden behind the high Land, that you cannot see it, then are you nearer to the Land, than to the Rock, or within the Rock towards the Land, and so you shall go through betwixt it and the Land.

Upon the *Lands-end* of England lie two round Hills, when you get sight of them, you shall see upon the highest a Spire Tower, coming somewhat nearer, you shall see upon the outermost end in the low Land, another Spire Tower, thereby is the *Lands-end* reasonable well to be known. The Ground is thereabouts whitish Sand, with red Sand, and mingled with shells.

From the *Lands-end* unto the Cape of Cornwall, or to the little Island *Bresam*, lyeth the Coast most North about five Leagues.

*Rocks on
the Lands-
end.*

At the *Lands-end* lie some Rocks, you may run in within them, as well to the Northwards as to the Southwards, and come to Anchor in 8 or 9 Fathom: to come in there from the Southwards it is narrowest, and 10 Fathom deep: from the Northwards it is best and broadest, and 8 and 9 Fathom deep: but on the left side close to the North Point of the *Lands-end* lyeth a sunken Rock, which you must avoid when you Sail in there.

And the Lands-end, to the Cape of Cornwall.

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Silly lyeth from the Lands-end West Southwest, distant 8 Leagues: but from the Erze West 16 or 17 Leagues.

Between the Lands-end and Silly lie the Seven Stones West and West and by South 4 Leagues from the Lands-end, and Northeast and by East, and East Northeast almost 3 Leagues from Silly; that is, a Ran of Rocks which come not above water, but always breaketh upon them.

South Southwest, and Southwest, and by South 4 Leagues from the Lands-end, and 3 Leagues East from Silly lyeth also a sharp Rock called the *Gulf*, which cometh at half Tide above water, and is round about indifferent clean.

Silly is divided into divers Islands; along the West side lyeth a great multitude of Rocks, Men may go in there through divers Channels or Sounds, but the Southern Channel is the best. About the midst of the entry of that Sound or Channel lyeth a funken Rock, Men may go in on both sides of it, but to the Eastwards of it, it is broadest and best. For to Sail in there coming from the East, you must run along by the East Land in 8 or 9 Fathom, and you shall so run along to the Eastwards of that foresaid funken Rock, which lyeth against a *Scence* a little without the Castle. The Marks to avoid this Rock, are two Rocks which lie on the West side within the Haven, the one, *vis.* the innermost, is somewhat greater than the other, if you bring them one in the other, or the Northernmost a little to the Eastwards of the Southernmost, or the smallest, so that you may even see through between them, and Sail so right in, and keeping them so, you shall Sail far enough to the Eastwards of the Rock. If you come from the Southwards, or the Westwards, and are bound into Silly, then run towards the East Land so long, until you bring the two foresaid Rocks within the Haven one in the other, or even through one another. Sail then so in, and then you shall run (as before is said) by and on the foresaid Rock, thwart of the *Scence*. At the inner Point of the Island at the East side of this Southern Channel lyeth another funken Rock, whereof Men must take heed. For to avoid it, you must run so long to the Northwards upon the Marks of the foresaid two Rocks, until you may see the little Tower in the

The Coast of England, from the Lizard,

Sandy Bay, then go to the Eastwards unto the Bay, and Ankor there in 8 or 9 Fathom. When you come near *Silly* upon the South side, you shall see a square Tower in the Sandy Bay or Valley, and to the Westwards many little Rocks. The Ground of *Silly* is somewhat stonie, with some red Shells.



Of the Depths and many sorts of Grounds before, and in the channel between *Silly*, and *Ushant*, and thereabouts.

Seams.

Southwest and by South from the *Seams* Seven Leagues, it is deep 72 Fathom; the Ground pale, white, coarse Sand, like small fretted little Stones, and white glistering Needles; Sail from thence North, and North and by East, and then you shall well to pass with *Ushant*.

About two Leagues Southwest from the *Seams*, it is deep 52 Fathom; the Ground there is white, yellow, rough, and somewhat longish Sand, with a little red small shelly Sand, with many gray crumpled things, and some small with glistering Points of Needles. If Men did find there 70 or 80 Fathom, they would judge it to be good Channel Ground.

Seams.

West Southwest from the *Seams*, so far from the Land, as Men may but even see the Sheets from the Poop with clear sight, it is 54 Fathom deep; the Ground is red, yellow, white and black pieces, like parings of Cheese, and a little coarse red Sand mingled withal.

Seams.

West and by South 8 or 9 Leagues from the *Seams*, is 65 Fathom; the Ground is white, yellow, with a little red small shelly Sand, with some pieces of Shells and Queens, not very great; with much white and yellow something long Sand, and small things like points of Needles, like as Men find in the Channel.

Seven

And the Lands-end, to the Cape of Cornwall. 109

Seven Leagues Southwest from *Ushant*, or thereabouts, that *Ushant*. Men may even see it from the Poop, having clear sight in 70 Fathom; there the Ground is white, and yellow coarse Sand, with some pieces of Queens shells, and some pieces of white thin shells, with some gray flat ragged Stones.

Southwest and by West from *Ushant*, about 19 or 20 Leag. *Ushant*. in 78 or 80 Fathom, the Ground is white and yellow coarse Sand, with small glistering Needles, with white pieces of Queens shells, and gray, and yellow flat Stones, and little pieces, like as if it were Oyster-shells.

West and by South from *Ushant* 21 Leagues, in 68 Fathom, *Ushant*. the Ground is red, yellow, and black, mingled with a little white round small Sand, like shelly Sand. But in 80 Fathom, 21 Leagues West and by South off from *Ushant*, the Ground is yellow, and shelly, with some gray and cromptled little Needles, like ends of small Ric.

In 80 Fathom, 24 Leagues from *Ushant* West and by South, *Ushant*. Men find rough great Sand, with many sorts of Shells, red, white, yellow, and gray, with pieces of Queen shells.

From *Ushant* West 16 or 17 Leagues, in 75 Fathom, the Ground is white and yellow coarse Sand, with pieces of thin white shells, and gray pieces of Queens shells, like as if it were of Oyster-shells, white small glistering things like Needles.

Eight or nine Leagues from *Ushant* it is deep 70 Fathom, the Ground red, white, yellow, and gray shelly Sand, with red, yellow, and black pieces of shells, and small red, yellow, black, and gray Stones, with some small white things like Needles.

Eight and forty Leagues West and by North from *Ushant*, *Ushant*. and 50 Fathom West Southwest from the *Lizard*, or thereabouts, it is deep 95 Fathom, the Ground red, yellow, and black Sand, with small white round shelly Sand, and some little pieces of shells, and Queen-shells, with some pieces of thin shells.

Three and thirty Leagues West and by North from *Ushant*, and 27 Leagues Southwest and by South from *Silly*, in 95 Fathom, the Ground is gray, red, and yellow, mingled with small black

The coasts of England from the Lizard,

black Sands, with dark, red, white, and yellow pieces of shells, viz. gray and red shelly Sand. An East Northeast Course from this Ground off, is the best; it is in the height of about 49 Degrees.

Ushant. Four and twenty Leagues West, or West and by North from *Ushant*, and South and by West from *Silly* 21 Leagues, in 80 Fathom, there the Ground is white, gray, red, and yellow fine small shelly Sand, with little red and white pieces of little shells, like bruised Mustard-seed in the height of 49 Degrees.

Ushant. Seven or 8 Leagues West, and West and by North from *Ushant* in 68 or 70 Fathom, there the Ground is white and yellow, small shelly Sand, mingled with many gray crompted little things like Needles.

Ushant. About 30 Leagues somewhat more Northerly from *Ushant*, in 90 Fathom, the Ground is small, white, rough, and somewhat long Sand, mingled with a little red and yellow, and some glistering little things like Needles, with 2 or 3 pieces of white gray shells. If you go on from thence Northeast and by North until you come in 55 Fathom, there the Ground is yellowish, white coarse shelly Sand with white pieces of shells; then you may see *Silly* lie 9 or 10 Leagues North, or somewhat more Westerly from you.

Ushant. West Northwest from *Ushant* 21 Leagues, and Southwest
Lizard, and by South from the *Lizard* 27 Leagues, in 80 Fathom, the Ground is gray, and red shelly Sand; there cometh also on the Lead a little piece or two of white or gray Queen shells, with yellow and red pieces of shells, also pieces of Perriwinkles.

Ushant, Nine Leagues Northwest and by North from *Ushant*, the Ground is white, and yellow, rough shelly Sand, with gray crompted glistering little things like Needles, there cometh also on the Lead little things like small straws. If you go on Northeast from thence, you shall fall with the *Scorrs*.

Twenty Leagues Northwest and by North from *Ushant*, and 16 Leagues Southwest somewhat Southerly from the *Lizard* in 68 Fathom, the Ground is white, yellow, and red small round Sand, with some white glistering little things like Needles, with 1 or 2 little gray crompted things like Needles, and 2 or 3 little pieces of little white shells.

And the Lands-end; to the Cape of Cornwall.

111

Nineteen Leagues North Northwest from *Ushant*, and 12 or 13 Leagues South Southwest from the *Lizard*, it is 68 Fathom deep; the Ground is there all manner of ragged Stones, gray, red, and black, with red pieces of shells, and some gray crompted little things like Needles. *Ushant, Lizard,*

Nineteen Leagues North and by West from *Ushant*, the South from the *Lizard*, it is deep 62 Fathom, the Ground is white and coarse shelly Sand, with white and gray crompted little things like Needles, with white pieces of shells, and 2 or 3 little Stones amongst it. *Ushant,*

Twelve or 13 Leagues West from *Silly*, or somewhat more Northerly, it is 60 Fathom; the Ground is gray and Oasie, mingled with small black Sand. In some places of the same depth, it is white, gray Oasie small Sand, with pieces of thin white shells amongst it, with a little piece or two like parings of Cheese: this Ground cannot be gotten up with Candle Tallow, or other hard Tallow upon the Lead, but with soft Tallow or Butter. In these depths you have no where such Oasie Ground as there, whereby Men may well know that they are on the back side of *Silly* or *England*, (to wit) West from *Silly*. *Silly,*

West from *Silly* 6 Leagues, it is Oasie gray Sand, with 2 or 3 little pieces like parings of Cheese. *Silly,*

Seven or 8 Leagues South Southwest from the *Lizard* in 16 Fathom, the Ground is white gross, with a little red Sand, with little shells, and little white glistering things like Needles. Nine or 10 Leagues South & by West from the *Lizard* in 60 Fathom: the Ground is yellow pieces of shells, and gray pieces of soft flat Stones like parings of Cheese, with some red pieces of shells, without any Sand therein.

Southwest and by West from the *Lizard*, and South South-west from *Silly* 19 Leagues, it is deep 78 Fathom, the Ground gray, yellow, and red shelly Sand, with red, yellow, and blew pieces of shells, with Queen shells, and a piece or two like parings of Cheese, or like pieces of Oyster-shells, with also 2 or 3 glistering little things like Needles, in the height of about 49 Degr. and 30 Minutes. *Lizard, Silly,*

The Coasts of England, from the Lizard,

Stear.

Fifteen or sixteen Leagues South-west and by South from the *Stear* in 57 or 58 Fathom, the Ground is full of pieces of all manner of Shells, and Queen Shells, with a little yellow and white Shelly Sand, with many sorts of little Stones, and gray little pieces like parings of Cheese, with some crumpled, and some not crumpled, but little glistening things like Needles, and little things like Maggots that are in Bacon.

Stear.

South Southwest from the *Stear* 16 Leagues in 53 Fathom, the Ground is white reddish Shelly Sand, with pieces of Queen Shells, with red gray little stones.

Southwest from the *Stear* 8 Leagues, it is deep 40 Fathom, the Ground gray and red Shelly Sand.

South Southwest from the *Stear* 13 or 14 Leagues, it is deep 47 Fathom, the Ground pale muddy Sand, with little long things, and little Stones.

A great kenning South Southeast from the *Stear*, it is deep forsy Fathom, the Ground red Sandy Clay with pits in the Tallow.

Stear.

Southwest 11 or 13 Leagues from the *Stear* in 50 Fathom, the Ground is white and yellow small Shelly Sand, with some pieces of white Shells, with gray and crumpled, and also glistening little things like Needles. In fine, he that soundeth much, getteth many and divers sorts of Grounds, and sometimes great change in little distance of place. But he that Soundeth, and findeth white Shells, with little things like Straws or Needles, it is certain that he is nearest to *Ushant*: but if he find brandy Ground, or black little Stones mingled with white little things, then is he nearest to *Silly*.

*Marks of
Ushant &
Silly.*

He that Soundeth thwart off *Ushant*, and findeth small white Sand, and little Shells, and small little things oasie and white, *Ushant* shall then lie Northeast from him. If he find long small little things like Needles, then shall *Ushant* be Southeast from him. But if he be not sure of these Grounds, then he shall bear to the Northwards. And if he find deeper water, then he is towards the *Seams*; but if he find it shoaldy, then he is in the entring of the Channel to the Northwards of *Ushant*. If he be between *Ushant* and the *Seams* in 70 Fathom, he shall find the Ground

And the Lands-end, to the Cape of Cornwall.

113

Ground to be little small Stones like black Sand of the Earth: or else if he find the Ground to be great red Sand, then he must stand to the Northwards, until that he find the fine white sandy Ground, and long small things, then he may hold himself certain to be in the entring of the Channel.

From the *Lands-end of England*, to the *Cape of Cornwall*, the Coast lyeth North about 5 Leagues, but *Silly*, and the foresaid Cape lie Southwest and Northeast, distant about nine Leagues. By the Cape lyeth a little Island or Rock called *Bresam*, betwixt it and the Cape Men may Sail through.

L. Bresam.

From the *Cape of Cornwall*, unto the little Town *St. Yves*, lyeth the Coast about East and by North, and East Northeast 5 or 6 Leagues. *St. Yves* lyeth upon the West Point of a great Bay, which is about 2 Leagues broad. At the East Point of the Bay lyeth a little Island; there lyeth off from it a great ledge of Rocks, a great half League thwart off into the Sea, whereof many of them come at half Ebbe above water, therefore he that cometh off from the *Cape of Cornwall*, and will Sail along the Coast towards *Stouper* or *Padflow*, must keep off (thwart of this Ledge) at least a great League from the shore, because of the foresaid Rocks; betwixt that foresaid little Island at the East Point of the Bay, and the main Land; it is also at many places Rocky and foul, so that one that is not there very well acquainted, may not Sail through there without great danger. In the Bay of *St. Yves* is on both sides good sandy Ground, where Men may Ankor all over, and come so near the shore, as they will. At the West side of the Bay at the Town, is a Head where small Ships and Barques do go in within it, and lie there succoured for Northerly winds, but great Ships may not do so, they must Ankor without in 6 or 7 Fathom.

S. Yves.

*Stouper,
Padflow.*

From *St. Yves* to *Hartland Point*, the Course is Northeast 17 or 18 Leagues; betwixt them both about half way lyeth the Point of *Stouper*; to the Eastwards of it lyeth *Padflow* in a Bay, where is a very good Road in 7 or 8 Fathom. At the West side of that Point lyeth a sunken Rock under water, and upon the Point a great high Rock, so the Westwards of that Point towards *St. Yves*, are many white Sandy and Chalky Bays along

The Coast of England, from the Lizard,

along the Shore, whereby the Coast there is very easie to be known.

Hartland-Point.

Hartland Point, is a Point that lyeth out, 4 Leagues North from it lyeth the Island *Londey*, which is somewhat a long Island, it lyeth most North and by West, and South and by East. At the East side of that Island Men may ride for Westerly Winds in 14 or 15 Fathom, but on the West side the Ground is foul.

Biddiford.

Four Leagues to the Eastwards of *Hartland-Point*, East Southeast from the South end of *Londey*, lyeth the Sound of *Biddiford*, being a broad Haven, where many Ships do Sail in and out. A little within the mouth of the Haven, it divideth it self into two Rivers; upon the Westermost on the Starboard side lyeth *Biddiford*, and upon the Eastermost on the Larboard side

Barnstable.

lyeth a Town called *Barnstable*.

From the Point to the Northwards of *Biddiford-haven*, unto *Ilford-Comb*, the Course is East Northeast 4 Leagues; that is a Haven where remaineth at low water 3 or 4 Fathom deep. Before the Haven is also a good Road, in 8 or 9 Fathom at half Flood.

Ilford-comb

Eleven or 12 Leagues to the Eastwards of *Ilford-Comb*, lie two little Islands, about two Leagues North and South one from

Flat-holm.

the other, called the *Holmes*; the Northermost is called the *Flat-holm*, and the Southermost the *Steep-Holm*; betwixt *Ilford-Comb* and the *Holmes* (somewhat nearer the *Holmes* than *Ilford-comb*) lyeth a Town called *Mineard*, where many Ships do trade.

In the fair way betwixt *Ilford-comb* and the *Holmes*, on the *English* side, on the one side, and the Banks on the *Welsh* side on the other side, in the midst of the Channel it is deep, 30, 25, 20, 18, 16, and 15 Fathom, the nearer the *Holmes*, the shoal-dier water. When Men come from the Westwards within the Island *Londey*, then they may see the Land on both sides, (*viz.*) of *England* and *Wales*. The *English* Coast even from the Cape of *Cornwall* to the *Holmes*, is altogether clean; but the Coast of *Wales* is most all foul and shoaldy, from the Island *Caldy* unto *Bristow*, with many Banks, Sands, and Riffs that lie off. The *Holmes* and the Island *Londey* lie West Southwest, and East Northeast, distant 19 Leagues.

He

And the Lands-end, to the C. of Cornwal.

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He that will Sail from *Londrey* to *Bristow*, must run along by the *English Coast*, until that he come within the Point of the *Naes*, for to avoid *Naes-sand*, and then forth along through between the *Holmes*, leaving the *Steepe-holm* on the Starboard, and *Flat-holm* on the Larboard side. Men may also with little Ships of small draught, Sail about to the Southwards of the *Steepe-holm*; but it is there so shoaldy, that there remaineth at low water no more than 2 Fathom water. Under *Steepe-holm* ^{Road under} *Steepe-holm* Men may Ankor where they will in 4 or 5 Fathom.

He that cometh off from the *Naes*, and is bound to *Bristow*, must stand over to the *Steepe-holm*, and run along to the Northwards of it. It lyeth from the *Naes* East Southeast about 7 Leagues.

For to Sail through between the *Holmes*, the right and best fair way, you must Sail nearest the side of the *Flat-holm*, there it is deepest; with an open wind Men may Sail along so near by it without any hurt, that they may cast with a stone upon it. Within, or to the Eastwards of the *Holmes*, lyeth shooting off from the East Land, a great shoald, lying off with a great Tail towards the West, which (coming from the West) Men might easily Sail within. For to avoid it, you must set the *Flat-holm* (when you are past it) Southwest from you, and keep it standing-so, until that you shall have Sailed about a great League; look out then for a little Island, that shall then at the East shore lie near about thwart from you; upon it stand two Mills, and above upon the main Land standeth one Mill. When the Mill that standeth upon the high Land cometh to the West end of that foresaid Island, you shall be past the foresaid Tail of the *English Grounds*, and cannot Sail within it; go then East North-east along by the *English Grounds*, which are flat, so that you may Sail along by them upon your Lead in 3 or 4 Fathom so near as you will. When then the Mill that standeth upon the high Land cometh between the foresaid two Mills which stand upon the little Island, then shall you be altogether past the *English Grounds*, run then boldly towards the *English Coast*, and so close along by it, as you please, towards *Passis* or *Port-shut Point*. From the *Flat-holm* to *Passis* Point in the right fair

The Coasts of England, from the Lizard,

fair way, it is deep 14 and 15 Fathoms. The *Wash* side you must thin, and take very good heed of it, because it is very uneven and full of steep Banks that are neede to, which at many places do fall dry at low water, you may not come nearer that Coast than in 12 Fathom, for (sailing towards it) you shall have at one cast 10 Fathom, and before you can heave the Lead again, you shall sit fast, along from *Flat-holm* until you come to *Bristow*. About *Passis* Point Men do Ankor in *Kings-road*, which is between the Point and the River of *Bristow*, nearest the River there is good Clay Ground in 8 or 9 Fathom. They that are bound into the River are brought in by the Pilots. Men may from thence also Sail in along by the Coast of the River of *Severn*, which is also like the River of *Briflow*, a fair River to sail into.

*Kings-
Road,*

For to sail from *Bristow* to *Loudey*, you must go away from *Passis* Point West Southwest, until that the *Flat-holm* do come to bear Southwest from you, or else until that the three foresaid Mills upon the South Land do stand alike far one from the other, viz. that which standeth upon the high Land, do stand in the midst between the other two, sail then right with the *Flat-holm*, and very close along to the Southwards of it, and being past it, go then forth West Southwest unto the Island *Loudey*.

Cardiff,

About 3 Leagues to the Northwards of *Flat-holm* lyeth the Town *Cardiff* in *Wales*, being a Tide-haven, before it is a good Road, as well for Ships that are bound to the Westwards, as to the Eastwards, where Men may lie Land-lockt almost for all winds, to the Eastwards and to the Northwards of it lie many Sands and Banks, which fall dry at low water, and so that they make Men Land lockt for Northeast and by East winds. He that is bound into the Road before *Cardiff* coming from the West, must run in betwixt *Flat-holm* and the Point of *Cardiff*, lying somewhat to the Southwards of *Cardiff*, and being come about the Point, then to the Northwards up along by the Shore unto Road.

*Silly,
Barry,*

Close up to the Point of *Cardiff*, (viz.) to the Westwards of it, lie two little Islands, the one next to the Point, is called *Silly*, and the Westernmost *Barry*: Berwixt *Silly* and *Flat-holm* lyeth

And the Lands-end, to the Cape of Cornwall.

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lyeth a Rock, Southeast, and Southeast and by East from the Point, which must be avoided when you will sail through there unto the Road of Cardiff. When it is high water, you may sail over all that which at half Ebb cometh not above water.

About 5 Leagues West from the Point of Cardiff lyeth the *Naes*; to the Westwards of it the Land falleth away first about *The Naes*, Northwest, then afterwards Southwest, or Southwest and by West, and so maketh a great Bay betwixt the *Naes* and *Wormshead*, where there are very good Roads for West, North, Northeast, and East winds.

From the *Naes* a little from the shore lyeth a great Bank, called *Naes-sand*, which lyeth off from thence West and by *Naes-sand* South, and West Southwest at least 5 Leagues into the Sea. From *Wormshead* likewise lyeth off a Bank which is very steep, called *Helwix*, about 4 Leagues South Southwest, and Southw. *Helwix*, and by South into the Sea; they that come from the Eastwards, and will go to ride in the Bay betwixt the *Naes* and *Wormshead*, run along close by the Point of the *Naes*, through betwixt the *Naes* and *Naes-sand*; Likewise they that come from the Westwards, and are bound in there, may run through close along by the Point of *Wormshead* and the *Helwix*, it is betwixt them both about an *English* Mile broad. He that cometh out of the Sea, may come in between the foresaid Sands or Banks, it is there wide and broad.

Wormshead is a Point lying far out, appearing afar off almost *Wormshead* like the *Old-head* in *Ireland*, but it is above or under, and goeth sloping down towards the North; it hath in many places Chalky spots, whereby it is very easie to be known.

About 4 Leagues to the Westwards of *Wormshead* lyeth the little Island *Caldy*, whereupon standeth a white Tower, shewing off at Sea like a white Sail, which is set there for to *Caldy* know the Land by.

Betwixt this Island, and the Point of *Wormshead*, the Land falleth away with a great Bay to the Northwards, unto *Carmanthen* and *Tinby*; in this Bay it is all over good Ankor Ground for to ride. On every side of the Island *Caldy* Men may also Ankor, and have shelter for all winds. A little to the Northwards

The coasts of England from the Lizard,

Wullox.

wards of *Caldy* lyeth a ran of sunken Rocks, called *Wullox*. He that will sail about to the Eastwards of the Island to *Tinby*, may run close about by it up to the Westwards, through betwixt the Island and the sunken Rocks, leaving them on the Starboard side, or else he may run along also to the Eastwards and to the Northwards of the sunken Rocks, leaving them on the Larboard side, and so then also to *Tinby*, and Ankor there before the Town in 5 or 6 Fathom. To the Eastwards, and to the Northwards of the foresaid Rocks, it is also good Ankerage in 6, 7, or 8 Fathom; it is there all clean Ground, and far off shoald water. Men may also sail through to the Westwards of the Island *Caldy*, (which is between the Island and the Point of the main Land) to *Tinby*; but it is there narrow, yet clean, and deep enough.

River of Carmarthen.

The River of *Carmarthen* lyeth from the Island *Caldy* North-east and by North, distant about 4 Leagues; the Channel for to Sail in there lyeth in East Northeast; on the East or South side lyeth a great Bank, which lyeth off far from the shore, and on the off-side goeth off flat. For to sail in there, Men may Sound it in along by the East or North shore, until they be over the shoaldiest of the Bar: there is upon it at half Flood about 14 Foot water; and being over the Bar it will be again 4 Fathom deep, or thereabouts; then they may run in forth by their Lead along by the South shore; until they come within the River.

St. Gawens Point.

Four or 5 Leagues to the Westwards of the Island *Caldy*, lyeth *St. Gawens Point*, the South Point of *Wales*, by some called the *White-Point*. About half an *English* Mile South South-west from this Point lyeth a sunken Rock, called the *Crow*, whereof Men must take heed.

The Crow.

Milford Haven.

Two Leagues to the Westwards of *St. Gawens Point* lyeth the Haven of *Milford*, a broad and wide Sound, lying in at the entry Northeast in; being come in within the Points, Men may go up to the Northwards, Eastwards, and Southwards, unto divers places and Roads. About by the North Point, Men may sail unto *Dale-road*, there it is good lying in 3 Fathom, and 3 Fathom and an half at low water. When Men come a little within the South Point in the open of *Milford Haven*, there lyeth

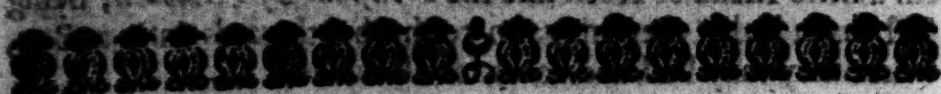
eth a little Island or Rock like the *Newstone* by *Plimouth*; being past that a little, they may run to the Southwards into a Bay, where they may lie Land-lockt for all winds.

A little to the Westwards of *Milford Haven* lie 2 little Islands, the Southermost is the smallest, called *Stockholme*, and the Northermost *Scaline*. About 2 Leagues North Northwest, *Stockholme* or Northwest and by North from thence lyeth the Island *Ramsy*, there betwixt them hath the Land a great Bay, called the *Broad-Bay*. *Ramsy* lyeth at the North-Point, and *Scaline* at the South Point of the Bay; there in along the shore is good riding for North, Northeast, East, and Southeast winds, in 7, 8, and 9 Fathom. Upon the North Point of this Bay lyeth a little Town, called *St. Davids*; to the Northwards of it lyeth the Coast of *Wales* along Northeast unto *Cardigan*. *Ramsy* Broad. *St. Davids*

About 2 Leagues West and by South to Sea-wards from the Island *Scaline*, and 3 Leagues to the Southwards from *Ramsy* lyeth that little Island *Grassholme*, which is a round clean Rock, and about 4 Leagues off from it lie also 2 little Lands, which are foul, called the *Smalles*. The lying of them, with the dangers thereof, you may read in the Description of *Ireland*. *Grassholme* *Smalles*

On the Northwest side of the Island *Ramsy* lyeth the *Bishop*, with his *Clarks*; these are Rocks that lie off to the Northwards, and Southwestwards of that Island a good way to Sea. About 5 Leagues Northwest, or somewhat Northerly from *Ramsy* lyeth another great Rock called *Mafons*, which is all round about foul, with many sunken Rocks. He that cometh to sail thereabouts, or to lie by, must take very good heed of them. *Bish. with his Clarks* *Mafons*

The Island of *Ramsy*, or the North Point of *Wales*, and the Southeast Point of *Ireland*, lie about East Southeast, and West Northwest, 16 Leagues.



Of the Tides and Courses of these Streams.

IN *Mounts-Bay*, and at the *Lands-end* of *England*, a West Southwest, and East Northeast Moon maketh high water.

In *Silly*, a Southwest and by West Moon maketh full Sea.

A Sea board off *Silly* in the Channel, likewise a Southwest and by West Moon.

In the entering of the Channel, a Southwest and Northeast Moon.

From *Silly* to the *Lizard*, the Flood falleth Northeast, and the Ebb Southwest.

Between *Silly* and *Londrey*, the Flood falleth Northeast, and the Ebb Southwest.

On the Coast of *England* between the Cape of *Cornwall* and *Hartland-Point* a West Southwest, and West and by South Moon maketh high water.

Thwart of the Island *Londrey*, a West and by South, and on the Island, an East and West Moon.

At the Island *Londrey*, and at the *Holmes*, an East and West Moon maketh high water.

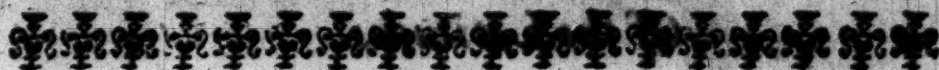
At *Bristow* within, a West and by North Moon maketh full Sea.

At *Milford-haven* an East and by North, and West and by South Moon maketh high water.

In the Channel of *Bristow*, between *Londrey* and the *Holmes*, the Flood falleth E. N. E. and the Ebb W. S. W.

Within the *Holmes* towards *Bristow*, the Flood falleth Northeast and by East, and the Ebb Southwest and by West.

Between *Londrey* and *Milford*, the Stream falleth Northeast, and Northeast and by East.



Of the Depths.

MEn may see on *Silly* the South side in 52 Fathom, and the Ground there is stony, with some red shels.

The *Lands-end* of *England* Men may also see in 25 Fathom.

Silly may be seen on the North side in 45, 46, and 48 Fathom, there the Ground is Oasie, with some little stones amongst it.

When Men are to the Northwards of *Silly*, it sheweth first in two Islands; upon the Eastermost they shall see a Tower or little Castle: to the Eastwards of the 2 Islands, they shall see also 2 great hilly Rocks, and to the Westwards three high black Rocks.

West Northwest, and West and by North 10 or 11 Leag. from *Silly*, the Ground is Oasie and soft, that Men can hardly get any of it upon the Lead, there come some little shels amongst it.

Betwixt the *Lands-end* of *England* and *Lander*, in the fair way, it is 45 Fathom deep: the Land of *Cornwall* Men may see in 44 Fathom.

Three or four Leagues without the Land thwart of *St Tves*, *Stouper*, or *Padstow*, the Ground is sharp and Rocky, but nearer the Land it is all Sandy Ground.

Betwixt *S. Tves* and *Hartland's Point*, are many white chalky Hills along the Coast, especially neaby *Stouper* or *Padstow*, whereby this Coast is to be known.

In the Channel betwixt the *Holmes* and *Bristow*, it is deep 3, and 4 Fathom, and Men may see the Land on both sides.

Upon the Coast of *Wales* about *Widford*, and to the Northwards of it, Men may see the Land in 42 and 45 Fathom.

Of the Latitudes.

| | |
|---|---------------------------|
| The South side of <i>Silly</i> lyeth in | 50 deg. or a little more. |
| The Cape of <i>Cornwal</i> lyeth in | 50 deg. 25 min. |
| <i>Londey</i> lyeth in | 41 deg. 13 min. |
| The <i>Holmes</i> lie in | 51 deg. 30 min. |
| <i>Milford</i> in | 51 deg. 46 min. |
| The Island <i>Ramsay</i> in | 51 deg. 50 min. |

For to know the Courses and Distances from place to place. See the Pilots Sea-Mirroure, in pag. 32, 33.

How these Lands do show themselves at Sea.



The Lands-end sheweth it self thus, when you come in right within out of the Sea.



The Lands-end being East from you, sheweth thus.



This sheweth *Silly* being East North-east from you.

When

When Silly is Southwest from you, it sheweth thus.



When the Island Londey is North from you, it sheweth thus.

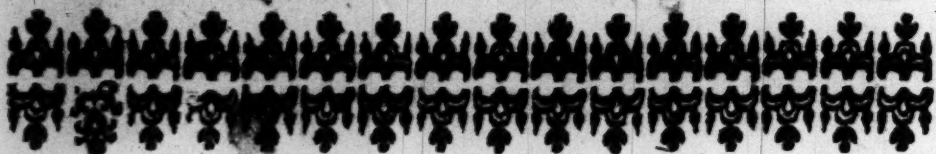


When the Island Londey is N. N. W. from you, it sheweth in this form.



R.

X. D. 1000



X DEMONSTRATION, Of the Coast of IRELAND.

From the Lands-end of *England* to *Waterford*, the Coast is North Northwest; from *Silly* to *Waterford*, the Coast is North and by West; somewhat Northerly 40 Leagues betwixt both; it is all Oasie and soft Ground, 9 or 10 Leagues in the *Offing* from *Ireland*, lyeth a Sand Bank 40 Fathom deep, where commonly Fisher-men lie to Fish; it is a certain mark of the distance of the Land, when in clear weather you have a sight of the high mountain *Dungarvan*. If you Sail from the Lands-end of *England*, to the Northwest Coast 43 Leagues, you shall fall before the River of *Cork-beg*, which is there a good way upwards at a low water 7, 8, 10 Fathom water.

*The Hill of
Dungar-
van.
Cork-beg.*

Four Leagues to the Eastwards of *Cork-haven*, lyeth an Island called *Ballecurin*, within it you may ride for Westerly and Southerly winds in 4, 5, or 6 Fathom: *Cork* and *Toughal* lie East Northeast, and West Southwest, distant 7 or 8 Leagues.

Toughal.

The Haven of *Toughal* is a broad Haven, where you may go in at high water by the East-land; it lyeth in Northwest, and Northwest and North: the West side is a Sandy Strand all along the Town. About a League South and by West from the Havens mouth of *Toughal*, lyeth a little Island called *Chappel-Isle*; on the East side is a good Road.

Chappel-Isle

Four Leagues to the Eastwards of *Toughal* lyeth *Dongarvan-bay*, betwixt both lyeth an out-Point: a little to the Eastwards of it standeth a high black Tower called *Ardmore*, which may be seen well 4 Leagues at Sea; within it is a Bay, which is a good Road for Westerly winds in 7 or 8 Fathom.

Ardmore.

Dungar-

The Coast of Ireland.

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Dongarvan is a narrow Tide-haven; the mouth of the Haven is full of Rocks; at low water it falleth dry: You must go in there at high water, and run in through betwixt the Rocks; it lyeth in North Northwest, within it is deep enough.

The Town of *Dongarvan* lyeth on the West side of the Haven; from *Dongarvan* to *Waterford* is 8 Leagues.

Within *Dongarvan* N.N.W. Land-wards lyeth the Mountain of *Sledges*, which is call'd the high Mountain of *Dongarvan*, or *C. Quin*. *C. de Quin*; it sheweth it self with three exceeding high Hommocks far above all other Lands thereabouts, and may be seen at Sea along a great part of the South Coast of *Ireland*. When you have that Mountain North Northwest from you, and Sail right in with it, you shall fall right with *Dongarvan*: when you have it North from you, and Sail right with it, then you shall fall with *Youghal*; being North Northeast, then you shall fall with *Cork*; but when it shall be Northwest, and then you run in, and you shall fall with *Waterford*.

The Haven of *Waterford* lyeth about 5 Leagues to the West-wards of the Southeast Point of *Ireland*, being call'd *Carnagart*; the Coast betwixt both lyeth East Northeast, and West Southwest, and sheweth it self in the Offing within the Land, with high Hills 2 or 3 double one above the other; but by the Sea side it is all low Land, where you may see many flat Towers upon it, as you sail along by it; the East Point of the Haven is a low Rock-Point, but it is clean; upon it standeth a high white flat Tower, called the Tower of *Waterford*, which you may see a far off at Sea, and is a perfect mark to know this Haven by. The West-Point is a high and foul Point, there lyeth a Shoal South-Southeast off into the Sea in 10 or 11 Fathom deep in the Havens mouth 7 Fathom, in some, at farther end 6 Fathom: within this River, within the East Point is a good Road in 4 and 5 Fathom; there lyeth on the West a steep Point, from thence beginneth a Shoal which lyeth to the Northwards along the Shore unto the steep Point of *Passage*, and shooteth over from that Point with a Tail towards the Shore. *Passage* is a Village where men pass over, lying on the West side of the River a little to the Northwards of the foresaid steep Point.

About

The Coast of Ireland.

About half ways between the Haven of *Waterford*, and the Point of *Carnarort* lyeth two little Islands about $\frac{1}{2}$ a League from the Shore called *Saltees*, the Southermost is the greater, and lyeth distant from the Tower of *Waterford* directly East almost 3 Leagues; you may Sail through between these two Islands in 5, 6, and 7 Fathom, keeping nearest to the smallest or Northermost Island, for to Sail between the *Saltees* and the main Land, you must leave two thirds of the distance of water from the Island, and one third part from the main, and you shall have at low water about 2 Fathom deep. About $\frac{1}{2}$ a League without the Southermost Island of the *Saltees* lyeth a Rock above water called *Kinbegh*, and Southwest about so far from it, and South and by West from the South end of the *Saltees*, lyeth a sunken Rock called *Kimor*, it is so steep, that a man may lie with a Ships side against it, and have 14 Fathom water.

Eastwards of the Rock *Kinbegh*, and Southeast from the greatest Island of the *Saltees* lyeth some sunken Rocks, called the *Frails*, which may be seen at low water.

Northeast from the *Saltees*, lie also Rocks; the Southermost is called the *Tuns*, and the Northermost the North Rock.

North Northeast from the greatest Island of the *Saltees*, or from *Kinbegh*, and Southwest and by South from *Carnarort*, lyeth one Rock above water, called the *Black Rock*, which is clean round about; but a quarter of a League Eastwards from it lyeth a sunken Rock, called the *Barrel*, of that you must take heed.

He that cometh out of *Waterford*, and will go about to the Southwards of the *Saltees*, must not go more Easterly than East Southeast, for to go cleer of the foul Grounds which lie to the Southwards of the *Saltees*, and when the *Saltees* shall be North off him, then lyeth the Coast from thence to *Tuskar* directly Northeast, or a little more Easterly; for to go along without the *Tuskar*, a man must go at least Northeast and by East to go cleer of him.

The *Tuskar* is a great black smooth Rock, lying like a Ship turned up side down, but about twice so great: at the North side of it lie also two small Rocks under water; the *Tuskar* lyeth

The Southeast and East Coast of Ireland.

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lyeth from the Point of *Grenore* Southeast and by East, and East Southeast, and distant 1 League from the *Saltees*, North North-East 4 Leagues, and $\frac{1}{2}$ from *Black Rock*, also East Northeast two Leagues and $\frac{1}{2}$, and from the Lands-end of *England* North and by West.

Southeast, and South, about 10 Leagues from the *Tuskar* lie two little Islands close one by the other, about 4 Leagues from *Graſholme*, called the *Smallees*, at high water, and Spring-Tides *Smallees*. the water floweth over them; the Northermost is call'd *Skabum*, and the Southermost is call'd *Kamey*; between the *Smallees* and *Graſholme* lyeth a ledge of Rocks, which at low water may be seen; it is not without great danger to go through betwixt them both, especially with Calms, by reason the Tides run very strong there through: an East Southeast Moon maketh high water without the *Smallees*.

From the *Tuskar* East and by South about 8 Leagues, lyeth also a great Rock, with many small Rocks round about it, call'd *Mascul*; he that cometh from *England*, and will Sail towards *Mascul-Ireland*, must take great heed thereof, especially, when as *Rock* through Westerly or Northerly winds he shall be driven a little to the Eastwards of the Coast.

For to Ankor under the Point of *Carnaroart* coming from the *Road under* West, you must take heed of coming nearer the Shore than 6 *Carnaroart* Fathom, until you be past the high Hill to the Westward of the Point, when you have brought the Hill to the Eastwards the length of a Capſton-Barr, you may Ankor in 9 Fathom, and good Riding.

Coming out of the Sea about a League or two near unto *Grenore*, you shall see the ragged double Land high above the *For to Sail* Point of *Grenore*, which (as is aforeſaid) is not very high, but *in Grenore* flat on the top, by that ſaid high double ragged Land within, men do know the entrance into the Channel of *Wexford*; when you come from the Southwards and the Eastwards, when you have ſight of the Point of *Grenore*, you may boldly Sail in with it, until that ſaid double Land doth ſhew it ſelf about a mans length above the Point of *Grenore*, then are you far enough from the Shore, not to be in any danger of the Shoald of *Grenore*; come

The Southeast and East Coast of Ireland.

come no nearer the Shore than 6 or 7 Fathom, nor go no farther out than 8 or 9 Fathom depth, otherwise you should come too near the Barr that lyeth to the Northwards of the *Tuskar*, which on the inward side is very steep; upon it is no more than 12 Foot water, and close by it 10 Fathom deep; if that you keep the foresaid ragged high Land a mans length above the Land of *Grenore*, and so Sail to the Northwards, so along until that you bring that same high Land without, or to the Northwards of the Point of *Grenore*, and must yet Sail to the Northwards, keeping the Mill so that you may see the top of it over the steep Point of *Grenore*; Then as soon as you see a Castle (which standeth a little without the Strand) come without the Point of *Grenore*, then may you Sail boldly towards it by your Lead into the Bay of *Grenore*: In the Bay it is Shoaldy water; you may lie there so near the Shore as you please in 6, 5, or 4 Fathom, and there you may get a Pilot to bring you to *Wexford*.

For to Sail
out of *Grenore*
Bay.

For to Sail out of *Grenore*-Bay, you may run out so close by the Shore, that you may but see the wings of the Mill over the Fore-land, and so go on East Southeast into Sea along by the Riff according as Wind and Tide shall be, so long until you shall see the Roof of the Mill, then you may go larger, and by little and little more Southerly, and then you shall see it ripple upon the Riff.

For to Sail
to *Wexford*

For to Sail out of the Bay of *Grenore* towards *Wexford* with a Ship that draweth little water, you may boldly run along by the Shore, and Sail through betwixt the *Hainmans path*, and the *Souder*, that is a Channel, where at high water and ordinary Tides, is 8 Foot water, but with a Spring-Tide is 10 Foot.

The *Hainmans path* is a dry Sand, which makes the South side of the Channel of *Wexford*, lying off from the *Souder*.

The *Souder*, that is the South Point of the main Land of *Wexford Haven*.

If you would be upon the Bar of *Wexford*, and leave the Shoald of *Hainmans path* (viz.) to go the Northwards, observe these marks; At the North side of the Channel of *Wexford* lyeth a high Hill with a round Hammock, which is to be seen over the Fore-land, and a little Castle in the low Land, a little

The Southeast and East Coast of Ireland.

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little above the Strand, bring that round Hommock a little to the Northwards of the Castle, and Sail so in, but bring not the Hommock within, or to the Southwards of the Castle, for then you shall be in danger of the Sand of *Hainmans path*. But if you cannot see these Marks, nor discern them well, you may go about the Sand of *Hainmans path* by your Lead in 7 Fathom without any danger. In this Channel upon the Barr, an East and West Moon makes highest water.

For to Sail from the Barr of *Wexford* within the Lands ^{*The Channel through the Banks before Wexford.*} through towards *Dublin*, you must keep the Sounding of the Shore; run along by it in 6, 7, or 8 Fathom, but not go further from the Shore than 8 Fathom, lest you come foul of the Banks which are on the inward side, very steep and needle. When you Sail to the Northwards along the Shore a League from the Barr, you shall see 3 white Spots or Rocks on the Sand Hill; a little to the Northwards thereof standeth a piece of Wall like a Pillar of a Church, right against this Pillar, a great English Mile from the Shore beginneth a Sand called *Busk* and *Ram*, lying from thence along the Shore to the Northwards, it is best to keep the Shore, and to run through in 6 or 7 Fathom: right against this *Rusk* and *Ram*, the Shore maketh a Bay unto the Point of *Glascarick*; when you are so far off this Point, then ^{*The Point of Glaskarick.*} you are past the foresaid Sand.

The Point of *Glaskarick* is a low Point; to Sail from *Glaskarick* to *Dublin*, run along by the Shore (which is somewhat full of Bays) in 6 7, and 8 Fathom: two great Leagues to the Northwards of *Glaskarick* a great $\frac{1}{2}$ English Mile from the Shore, lyeth a Sand call'd *Glaskarmen*; an English Mile to the Northwards of *Glaskarmen*, lyeth the Point of *Arklow-head*; ^{*Marks to avoid Glaskarmen.*} Sailing through between the shore and *Glaskarmen* to the Northwards, a man may see two Points, (viz.) *Misen-head*; and to the Northwards of it *Wicklow-head*; if you keep *Wicklow-head* even within the Point of *Misen-head*, then you can take no hurt of *Glaskarmen*; but if you will Sail a Sea-board of the *Glaskarmen*, then keep *Wicklow-head* a good ways without the *Misen-head*; and then run along a Sea-board of it, and then you can take no hurt of it.

The Southeast and East Coast of Ireland.

The Ledge of Arklow. At the North Point of *Arklow-head* lyeth a little stonie Ledge very steep and needie too, a man must take good heed of it, coming from the Northwards; and bound to the Southwards, you must come no nearer it than in 5 Fathom: at the North side of the Point of *Arklow* is a fair Sand Bay, there is good Ankor Ground in 8, 7, or 5 Fathom; in this Bay are good store of Herrings caught.

Misen-head About two Leagues to the Northwards of *Arklow*, lyeth *Misen-head*, it is a black Head betwixt *Misen-head* and *Arklow*, in the fair way, it is 8 or 9 Fathom deep; it is all along good Ankoring, and clean Ground.

Wicklow-head. From *Misen* to *Wicklow-head*, it is also two Leagues, but this reaches shorter than the other to *Arklow*.

Fourteen English Miles from *Wicklow* lyeth the Point of *Bray*, a high steep strong Point, and high Land thereabout on the Sea Coast; within the Land lyeth a high Hill like a Sugar-Loaf, the fourth of the 3 Hills in the Land call'd the *Vineyards*.

Bray-head. *Bray-head* is very steep likewise, also the Ground by it is 10 Fathom deep close by the shore: to the Northwards of the Point lyeth a little Tide haven, there stand the Houses call'd *Bray* on the North side.

Dalkey Island. From *Bray-head* to the Island *Dalkey* lying at the South Point of the Bay of *Dublin*, the Coast is North and by West 4 English Miles, there betwixt both goeth in a Bay, at the Northeast side of the Island *Dalkey* lie some Rocks lying along the main, not far from it Men Sail within the Island thorough, and leave all the Rocks, and the Island lyeth to Sea-wards.

The Sound of Dalkey. The Sound between the Island *Dalkey* and the main Land, is call'd the Sound of *Dalkey*, it lyeth North North-west, and North and by West, through it is 7, 8, and 9 Fathom deep.

Heath. The North Point of the Bay of *Dublin* call'd *Heath*, or *He-denough*, is a very high Point, it sheweth a far off as if it were an Island, but is fast to the main Land with a small and very low neck; to the Northwards of it lie the Island *Irelands Eye*, and *Lambey*, those may be seen to the Southwards of the Point of *Heath*, and being before the Point of *Dublin*, over that fore-said small neck of Land.

From

The Southeast and East Coast of Ireland.

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From the Sound of *Dalkey* to the Barr of *Dublin*, the Coast is North Northwest, in the fair way it is deep 9, 8, 7, 5, and 4 Fathom, nearer the Barr it is shoalder water; when you Sail up, you must keep the Westernmost Rock that lyeth without the Island *Dalkey* a Hand-spikes length open of the Island, or the other Rocks; or you may Sail more to the Eastwards right towards the low Land of the Northward Shore, and then by your Head along by it to the Bar; from the South Shore runneth off a great Tail of Sand almost by the North Shore, to the Northwards of it goeth a Deep; in upon that Tail a little within the Point stands a Beacon of a Mast made by the English men, call'd the *Pearsing*.

Pearsing.

For to go clear of that, you must run so far to the Northwards for to avoid this Sand coming from the Southwards, look out for the Island *Irelands Eye*, keep that so that you may but even see it over the low Land, close after it to the high Land of *Hoath*, so you can take no hurt of that Island; when the Tower of *St. Patrick* in *Dublin*, which standeth on the Land-side of *Dublin* cometh right over that Beacon the *Pearsing*, then are you right against the Point of the Sand which shooteth a good way to the Northwards of the *Pearsing*; for to go clear of that, you must run so far to the Northwards, until the *Pearsing* cometh right over the Castle with 3 Turrets, which standeth to the Southwards of the Town; or when the *Pearsing* cometh between that Castle and the Town, then are you above the Point of the Sand, then go in West and by South, until you come over the shoaldest of the Bar; there is at a Spring Tide 15 or 18 Foot water, but at low water and Neap Tide, not above 6 Foot water.

Marks of the Land.

If you are bound for *Dublin*, and would avoid the Sands and Banks that lie along the East Coast of *Ireland*, run then so far to the Northwards, until you can see the little Island (the *Irelands Eye*) without the Point of *Hoath* or *Hedenbough*, run then right on to *Hoath* or *Hedenbough*, and then you shall take no hurt of the North Grounds.

Of the Tides and Courses of the Streams.

Between *Corkley* along the Coast before *Waterford* into the *Point Carnarogart*, the Flood falleth along the Coast East Southeast, and the Ebb West Southwest.

At *Waterford*, an East and by North, and a West and by South Moon maketh high water.

On the East Coast of *Ireland*, to the Southwards of the Bay of *Dublin*, an East Southeast, and West Northwest Moon maketh high water.

At *Dublin*, a Southeast and Northwest Moon.

Of the Depths.

From *Corkley* to the Eastwards of *Waterford*, you may see the Land in 24 Fathom: the most part of the South Coast of *Ireland* you may see it in 35 and 40 Fathom: in 35 Fathom you shall not be far from the Land, therefore come no nearer *Ireland* by night, than in 40 Fathom.

The Latitude.

Waterford lies in

52 degr. 30 min.

Dublin lies in

53 degr. 32 min.

For the Courses and Distances, See *Pilots Sea-Mirror* in pag. 35.



XI DEMONSTRATION.

Of the Northeast Coast of IRELAND.

THe North Point of the Bay of *Dublin* call'd *Hoath*, is *From the*
 round about clean, so that a man may Ankor round a *Bay of*
 bout it; to the Northwards of it lie the Islands of *Ire-* *Dublin to*
lands Eye, and *Lambay*, *Irelands Eye* is the smallest, *Horn-head*
 it lyeth between the foresaid Point of *Hoath* and *Lambay*; at *Irelands eye*
 the West side of it standeth a little Chappel, right against it you
 may ride; at the South end lyeth a little strong Riff, which may
 be avoided.

About 6 Leagues Northwest and by North off *Lambay*,
 lyeth the Haven of *Droghedah*, and hath a crooked Haven, *Droghedah*.
 which is not good to come into without a Pilot.

Four or 5 Leagues to the Northwards lyeth the Haven of
Dundalk, which is Shoaldy and little used.

Dundalk.

North and by West 11 Leagues from *Lambay* 7 Leagues to
 the Northwards of *Droghedah* 2 Leagues from *Dundalk*, lyeth
 the Haven of *Carlingford*, the South Point is very foul with
 Rocks, and sunken Rocks, which you must shun, and run in by
 the Northern Shore; when you are within the sunken Rocks,
 you must run over to the Southern Shore, and in along by it,
 until you come before the Town of *Carlingford*, and Ankor
 therein 6, 7, or 8 Fathom.

Carlingford.

Green-Castle lyeth at the Northeast side of the Haven two
 Miles from *Carlingford*.

Green-Castl.

About 7 Leagues Northeast from *Carlingford* lyeth a Point
 call'd *St. John Point*, about $\frac{1}{2}$ wayes betwixt both lyeth the high
 Mountain of *Carlingford*; from *S. John's Point* lyeth off a ledge
 of Rocks, whereof you must take heed.

St. John's point.

A great League to the Northwards of *St. John's Point*, lyeth
Arglas: from thence to the Haven of *Srangford* is three small
 Leagues.

Arglas.
For Srangford

The Northeast coast of Ireland,

For to Sail into the Haven of *Strangford*, you must leave the sunken Rock which lyeth a little off of the South Point, on the Larboard side, and go to the Northwards of it; but you must take good heed of a foul ledge of Rocks on the North Point, when you come so far as *Audleys Castles*, there you may Ankor, or run in about to the Point on the Larboard side, and Ankor therein, about a League and a half to the Northwards of *Strangford* lyeth the Rocks, South Rock, and North Rock, betwixt them both a fair broad Sound, where a man may Ankor in 6, 7, or 8 Fathom deep.

Kopland-Isles.

The *Kopland-Isles* lie about an English Mile from the Land at the East Point of the Bay of *Knockfergus*; the North Point of *Knockfergus*, lie distant from the *Kopland Island* 3 or 4 Leagues Northwest, or somewhat Westerly.

The Bay of Knockfergus.

The Bay of *Knockfergus* is a great broad Sound, about 3 Leagues inwards, in the Bay W. from *Kopland Isles*, is the Road before *Knockfergus*, there is good Ankor Ground in 3 Fathom and a half somewhat farther to the North Point: on the North side of the Bay standeth *Monsie-Hill Castle*; there is good Ankorage for North and Northwest winds, but a South and South-west wind maketh a bad Road in those places.

Cow-Island.

To the Northwards of the N. Point of the Bay of *Knockfergus* lyeth a little Island call'd *Cow*, from thence lyeth the Coast of *Ireland* forth N. N. west about 9 or 10 Leagues into the Islands of *Raghlens*, betwixt them both lyeth the 9 *Maids*, which are great Rocks-lying one great League without the Land, and two great Leagues to the Northwards of the Bay of *Knockfergus*; he that cometh from the fair Foreland, must at least go Southeast and by East for to run clear of the fore Grounds at *Raghlens*, or *Fair Foreland*, the Northeast Point of *Ireland*; *Scotland* and *Ireland* comes nearest one to the other.

The Raghlens.

The *Raghlens* is an Island that Men may Sail round about; at the Southwest side is a fair Bay, where is good lying almost for all winds.

Skirris Portrush.

From *Raghlens* to *Skirris Portrush*, the Coast is West South-west, distant 7 Leagues: the *Skirris Portrush* is a rocky Island, it hath on the South side a fair Bay, where you may lie in 6 or 7 Fathom

Between the Bay of Dublin and Horn-head.

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Fathom in clean and Sandy Ground Land-lockt for all winds, except the East Northeast wind : for to come under this Island from the East, you must go close by the Shore on the main Land to avoid the sunken Rocks call'd the *Chickens*.

Three Leagues West and by North off *Portrush*, lyeth the Haven of *Loughfoil*, before it lyeth a great plate of Sand call'd the *Tuns*, which lyeth from the West Point of the Haven a great way to the Northwards off from the Shore.

For to find the Channel that lyeth into the Westwards of the *Tuns*, you must look out for a little Sandy Bay which lyeth on the West side even within the North Point of the River under the high Land, bring it so that you may see it open off the foresaid North Point, and Sail in thereupon until you come by the Land, and then run in along by it Southwest, until you come right against *Green-Castle*.

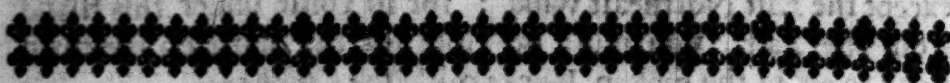
For to Sail up from *Green-Castle*, you must run up along by the West Shore by your Lead, and shun the little Sand that lyeth here and there along the side, until you come past which Castle right against the 3 Trees there, there is the ordinary Road, there is your ordinary Road up to *Derry*.

From *Loil-haven*, unto the Island *Eneferhul*, the Coast is Northwest 4 or 5 Leagues : betwixt the Islands and the Points Men may Sail through, but not without great danger.

From the Island *Eneferhul* unto *Loughswilly*, the Coast is Southwest 5 Leagues, that is a fair Haven : for to Sail in there, you must shun the West side, and go in by the East shore; the Land about *Loughswilly* is the highest Land of the whole North Coast of *Ireland*, and thereby it is easie to be known.

Four or 5 Leagues West Southwest, or somewhat Westerly, lyeth a large broad Haven call'd *Sheep-Haven*, it is in some places foul ground, within it Men may lie Land-lockt for all winds; the West Point lyeth out call'd *Horn-head*, or *Cape de Horn*; upon it is a Hill, with two Hommocks like two Horns, and thereafter the Point is named.

of,



Of the Tides and Courses of these Streams.

AT *Dublin* a Southeast and Northwest Moon makes high water. The Flood cometh here from the Southwards, and also from the Northwards, about the North part of *Ireland*, and meet one another about *Carlingford*, and there stop one the other: the Ebb contrariwise falleth to the (Northwards of *Carlingford*) to the Northwards, and to the (Southwards of *Carlingford*) to the Southwards.

On the Coast of *Ireland* to the South Rock and North Rock, up to the *Hopland-Isles*, a South Southeast, and North Northwest Moon maketh full Sea; but to the Southwards of it a Southeast Moon.

In the Haven of *Loughfool* an East and by South, and West and by North Moon; the Flood cometh out of the West, and Northwest.

At the Island *Enestherbul* and *Sheep-haven*, an East and West Moon maketh full Sea: the Flood cometh out of the West.



Of the Latitude of Places.

Fair Foreland lies in

55 degr. 35 min.

For the Courses and Distances, see *Pilots Sea-Mirroure*, in pag. 35.

XII DEMONSTRATION,

*Of the Northwest and West Coast of
Ireland, from Horn-head to Cork-
beg.*

West Northwest about two Leagues from *O. de Flork*, lyeth the Island *Tore*: to the Southwards of it lie 3 *Tore-Ils.* Islands, called *Bailnefs*. Men may Sail through betwixt to the Southwards of *Tore-Island*: betwixt it and the Island *Bailnefs*, from the Island *Tore* to the Isles of *Aran*, Islands of the Coast is Southwest 6 and 7 Leagues betwixt both; near *Aran*. *Aran*, lie some high Rocks call'd the *Stags* of *Aran*: betwixt *Horn-head* and the Isles of *Aran* is good Ankor ground all along. *Stags of Aran.*

Upon the Northwest Point of *Ireland* a good ways Landwards in, lyeth a high Hill like a Sugar-loaf, which is seen in clear weather before any other Land 9 Leagues off, when that hill lyeth East and by South from you, then Sail in right with it, you shall not miss to fall right with the great Island of *Aran*.

From the Island of *Aran* unto the Point of *Tellinghead*, the Coast is South Southwest 8 or 9 Leagues to the Southwards of the Cape de *Tellinghead*, betwixt the Cape and the *Staggs* of *Broad-haven*, lyeth a Land, with a great Bay, wherein lie many good Havens, as *Telling*, *Kilbeg*, *Dungal*, *Ballishanon*, *Sliego*, *Endrigo*, and *Moy*.

Kilbeg is a fair round Bay, but very narrow at the going off: about half a League to the Westward of this Bay, a quarter of a League from the Land, lyeth a little Island, which is very low.

The Northwest and West Coast of Ireland,

and plain at both ends, men may Sail thorough between the Island and the main Land if they will; when you come out of the West, and are past that Island, then go near the Shore which is clean, until you shall see this Bay open, and then Sail boldly in without fear: you may Anker where you please in 5, 6, 7, or 8 Fathom.

A great League to the Southwards of *Kilbeg*, lyeth a great *St. John's long Point*, call'd *St. John's Point*, right West from that Point about a mile, lyeth a great Rock: men may Sail boldly through between the Rock and *St. John's Point*, which is there clear and clean.

Dungal Haven.

About two Leagues to the Eastwards of that foresaid Point, lyeth the Haven of *Dungal* into the Southwards: to Sail in there, you must shun the Eastern Shore, which is very foul, with dry Plates and Rocks, till you come right against a little Castle which standeth on the North side, right against it lyeth off a little Riff from the Shore, which you must avoid, and when you come about the Point of that Riff, you must go over again to the North side, for the South side is flat and shoaldy.

Moy haven.

For to Sail into the Haven of *Moy*, you must leave the Rocks that lie there on the West side, and run towards a little Sandy Island, that hath at the North end a little Riff, you must go into the Westward of it, and leave that Island on the Larboard side: within that foresaid Island lyeth another little round green Island, which must be left on the Starboard side, so soon as you are right against it, let fall your Anker, it falleth there at low water always dry.

If you will go from thence to the Town of *Moy*, you must light your Ship 8 Foot, to come through betwixt the small Islands, and the South Grounds: with an ordinary Tide, there is no more than 9 Foot water.

The Stags of Broad Haven.

The *Stags of Broad-haven*, are Rocks that lie to the Northwards, a League or a League and a half a Sea-board of the Point to the Northwards of *Broad-haven*.

Ackley-head is a very high Point, and sheweth it self afar off like an Island, with a great Saddle, thereby it is good to be known: to the Northwards and Eastwards of *Ackley-head*, lie divers Havens, where it is good riding.

From

From *Ackeley-head* to *Slime-head*, (by Sea-men call'd *Twelve Slime-head*, pence, because the Land doth shew it self in 12 round Horns or 12 pence macks,) the Coast is South somewhat Easterly 11 Leagues, betwixt them both lie 3 Islands before a great Bay, the Northernmost or next to *Ackeley-head* is call'd *Cleer*; this hath a high Hill on the North end, which is very steep, and at the South end it is flat going down: the middlemost is call'd *Boche Rack*, within it is a Road for those that are bound to the Southwards, where men may Ankor in 4 Fathom, betwixt the Southernmost is call'd the *Horse*, betwixt *Ackeley-head* and *Twelve Pence*, lyeth within the Land a very high Hill call'd *St. Patrick's Hill*, that *Patrick's* may be seen far off at Sea, and shall be seen long ordering it self *Hill* by the Cliff-land, as men Sail along either to the Northwards or the Southwards.

From *Slime-head* or *Twelve pence*, unto the Sound of *St. Gregory* before the Bay of *Galloway*, the Coast is Southeast 9 Leagues, where lie three great Islands call'd the Islands of *Aran*, the *Aran*. Southernmost is the greatest, the Channel between the Northernmost and the middlemost, is call'd the Sound of *St. Gregory*, *St. Gregory's Sound* which is on both sides clean, you may also Sail to the Northwards of the Northernmost Island into the great Bay of *Galloway*, and to the Southwards of the Southernmost, leaving two third parts of the Channel towards the Islands, as well in Sailing in, as Sailing out.

Somewhat within the Island on the South side lyeth a high black Point call'd *Black-head*; about two Leagues Northeast from the *Black-head*, lyeth an Island call'd *Muston-Isle*, under *Black-head* it on the East side you must Ankor in the Pool in 5 or 6 Fathoms: when you Sail from *Black-head*, towards the North Island, you must take heed of the North side, and edge more towards the South side.

From the Bay of *Galloway* to *Lupishead*, goeth in the Haven of *Limbrick*; four Leagues East Northeast within the foresaid Point lyeth an Island call'd *Searick*, you must Sail along without it to the Southwards, leave it on the Larboard side in Sailing up; about half ways betwixt that Island and *Lupishead*, lyeth a Shoald, which you must shun, and run along to the Southwards of it.

Seavick From the Island *Seavick* unto *Limbrick* are 12 or 13 Leag. First from thence to the Island *Quoin* 4 or 5 Leagues, there are two little Islands, you must sail close along to the Northwards of them, from thence East Northeast unto a great Rock call'd the Great *Beef*; and then Southeast unto another great Rock, call'd the little *Beef*; when you come before the Town in the Haven, you must make fast on the Castles with 3 or 4 Cables, for there goeth a very strong Tide as well of Flood as of Ebb: an East Northeast Moon maketh there full Sea.

Island Smerrick From the Haven of *Limbrick*, to the Haven of *Smerrick*, the Coast is Southwest 8 or 9 Leagues: betwixt them both lyeth the Coast with a great Bay, wherein lie some little Islands call'd the *Hogs*.

A little to the Eastward of *Smerrick*, lyeth *Sinbrandon-hill*, a very high Hill; they that come out of the Sea from the Westwards, shall see that Hill first before any other Land, and thereby easily know it: Men may see it at Sea in the *Offing* 12, 14, and sometimes 16 Leagues off, according as the weather is clear.

Four or five Leagues West Southwest from *Smerrick*, a little off from the Land, lyeth 4 or 5 Islands, being high round Hills and Rocks, call'd the *Blaskeys*.

Three great Leagues to the Eastwards of *Blaskeys*, lie 3 great Rocks call'd the *Skellocks*, the Eastermost about a League, and the Westermost two great Leagues a Sea-board the Land; when you come from the Southwards, and see them first, they shew like Sails of Ships: Betwixt the *Skellocks* and the *Blaskeys* goeth in a great broad Bay deep into the Land, called *Dingle Bay*, with divers Havens in it.

The *Skellocks* and the *Cape Dawsey* lie Northwest and Southeast 6 Leagues asunder: betwixt them both goeth in also a great broad Sound, Northeast in, wherein lie many Islands, Havens, and Roads.

About 6 Leagues East Southeast from *Cape Dawsey* lyeth the Point *Mizen-head*: betwixt them both goeth in a great Bay or River deep into the Land, with divers Havens and Roads call'd the *Bantry*.

From

From Sline-head, to Cork Bay.

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From *Mizen-head* unto *Cape Cleer*, the Coast is East and by South, distant 7 Leagues.

About 3 Leagues within, or to the Eastwards of *Mizen-head* Northwest from *Cape Cleer* lyeth a Haven, called *Crook-Haven*.

Two little Leagues West and by South of *Cape Cleer*, lyeth a high steep Rock along in the Sea call'd *Fasney*, which sheweth at first sight like unto a Sail: a little to the Eastwards of the Island of *Cape Cleer*, lyeth another Island call'd *Isle Shark*; to the Eastwards of it betwixt that Island and the main Land, goeth in a Haven call'd *Baltamore-haven*; it is somewhat narrow at the Mouth of the Haven, but within the mouth of the Haven, it is large and broad, there you may ankor on both sides where you will; and lie Land-lockt for all winds.

A little to the Eastwards of *Baltamore* lie the *Stags*, an *English* Mile from the Shore; when men come from the Eastwards along by the Shore, and see them first, they are like some spired Towers together: men may Sail between them and the main Land; there it is large and broad enough.

Northeast about two Leagues from the foresaid *Stags*, lyeth *Castle-haven*: without it, on the East side lyeth a little Island, you must leave it on the Lar-board side; when you are come in thwart of the little Chappel, you shall see a Castle on the West side, over against that Castle you may Ankor in 12 Fathom.

From *Castle-haven* unto the *Old-head*, the Coast lyeth most East Northeast, and West Southwest; but *Cape Cleer* and the *Old-head*, lie Northeast and by East, and East Northeast, distant 14 Leagues.

The *Old-head* or *Cape-de-Velth*, is a Point that lyeth out far without the other Land, the outermost South end of it is very high and steep, upon the top of it standeth a ruined Castle with 3 Towers, whereof the middlemost is the highest.

About 2 Leagues North and by East from that Point, lyeth the Haven of *Kinsale*, lying in North Northeast; you may Sail in there, keeping the middle of the Channel, there is no danger, neither without nor in the the Harbour-mouth: when you come in from the *Old-head* or from the Southwards, and you keep an old ruin'd Castle (that standeth within the Haven on the East side).

The West Coast of Ireland,

side) even without the innermost East Point of the Haven, then you shall not come near that Rock to take any hurt of it: a little past that aforesaid ruin'd Castle, standeth a Castle on the West side upon a Point, there lyeth off a Shoald, which must be shunned, and therefore you must keep close along by the Eastern Shore, until you be gotten about the Shoald of the Castle, and then Westwards up unto the Key of *Kinsale*, there you may Ankor in 8 or 10 Fathom, and lie Land-lockt for all winds; the Town of *Kinsale* lyeth a little to the Northwards in a Bay, where it is Oasie soft ground, part whereof falleth dry at low water.

Four Leagues to the Eastwards of *Kinsale*, lyeth the Haven of *Cork*; betwixt both about a League to the Westwards of *Cork*, you shall see, (Sailing along by the Coast) two steep Hommocks like Towers in the Land not far one from the other; these are notable Marks to know the Coast; when you are thwart of the Eastermost you may see the Havens-mouth of *Cork*, that lyeth in North Northwest; within it is wide and broad, and goeth up into the Land with a broad River; on the East side somewhat within, is a Point, where lyeth off a ledge of Rocks, which may be shunn'd there, over against on the West side, somewhat far in lyeth another Point, with an old ruined Castle, there also lyeth off a Shoald to the Northwards of it, men go about to *Cork*, within that Castle lyeth a little Tide-haven, and a Sandy Bay, within the Haven lyeth an Island, wherein men do Sail round about, and on the South side thereof may ride; it is in this Haven of *Cork* at low water 7, 8, or 10 Fathom deep.

Without the Point to the Eastwards, is all low Land unto the Point of *Tonghal*.

In all these foresaid Havens an East Southeast, and West Northwest Moon maketh high water. Without *Cape-Cleer* by the Land, the Flood falleth away East, and the Ebb West. Betwixt *Cape-Cleer* and *Dorsey*, Men may see the Land in 58 and 60 Fathom.

Latitudes.

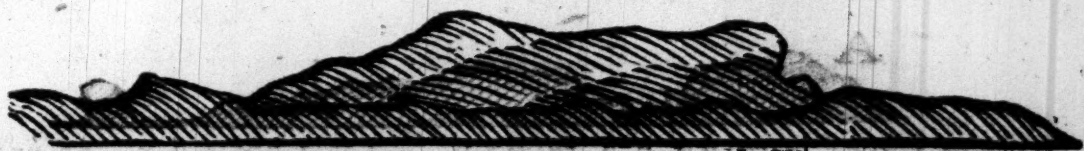
Cape Cleare lyeth in
Cape De Velho or *Oldhead*

5 degr. 12'.
21 degr. 28'.

How

How these Lands do shew themselves at Sea,

Dongarvan.



When you are before Jochull, or thereabouts, (two or three leagues from land) so that the high mountain of Cape Quin be North and by West from you, then sheweth the land thus, the double inxerland is very high blew land, you may see it in clear weather twelve or thirteen leagues off.

Sound point of Dublin.

Island Dalke.



When a man cometh from the Southwards, thus sheweth the Bay of Dublin,

The point Houth,

Island Lambey,

A



with the point Houth, and the Island Lambey to the Northwards of it.

Don Patrick or Patrickshill.



Thus sheweth S. Patricks hill, when it is S. E. and by S. from you, being not far from Land, at the N. side of it lye some little Islands and Rocks.

Mizan.

Mizenhead.

A broad Channel, but within it



is all broken Land.

Eastnortheast C. Clear.

A

when as Cape Cleare is e. n. e. from you, and Mizenhead n. e. and by e. then is the Land unto the Dorseys in these forms, as is shewed in these two Figures here before.



A

Thus sheweth Oldhead when it is w. f. w. a half League from you, then may you see the Haven of Kinsale open.



The Land a little to the Eastwards of Kinsale sheweth thus.



The land to the eastwards of Cork towards Jochul, sheweth in this form.

XIII DEMONSTRATION.

The Coast of France from Ushant to Bayon.

The *Fourne* and *Ushant* lye West South-west, and East North-east, distant 2 great Leagues. *Ushant* sheweth *Ushant*, it self at Sea at the South end low, at the North end going up sloping; upon the midst of it standeth a little flat Tower; by which Marks it is easie to be known. For to Sail through within *Ushant*; the Coast from the *Fourne* to St. *Matthews* Point, is South South-east 4 Leagues: At the Point of the *Fourne* lyeth two rows of little Rocks, and to Southwards of them, along the Coast, lyeth three other heape of Rocks, each of them about an *English* Mile one from the other: Run along within two Cables lengths by the aforesaid Rocks, at the Point which is much nearer the East side, or the Main-land, than *Ushant*, for to shun the Northern *Hagbels*, which do lye between *Ushant* and the foresaid Rocks, or else if you keep St. *Matthews* Abby in the low valley to the Eastward of *Conquers-oort*, and sail so right with it, that you run through nearest the East side, and in the midst of the Channel between the foul Grounds and the Rocks, until you come thwart of *Blank-bay*, or near *Conquers-oort*, there standeth a Mill on the high land alone, when it is East from you then the Souther *Hagbels* lye West and by North from you, and the Norther *Hagbels* North-west and by West: When *Hulman* or *Hayman* *Hulman* *Hil*, a high Rock lying on the East end of *Ushant*, cometh over Hill. the North-west end of the Northernmost *Mullins*, then are you

The Coast of France,

Conquets-
Oort.

also off thwart of the *Hagbels*. He that must turn to wind-wards from the *Fourns* toward *Conquet* or *St. Matthews Point*, let him make use of these Marks: In the Point of *Conquet Haven*, or *Conquets-Oort*, are two Valleys, the one is great that is the Westermost, and one little that is the Eastermost, in manner as is here portrayed.

S. Matthews Cloyster.

Conquets oort.



Norther
and Sou-
ther Ha-
gbels.

The Vint-
ner.
Conquet
Haven.

Fenistiers.
Blanch
Moins.

When you run over to the Eastwards, towards the Land, and that the Abby of *St. Matthews* comes at Capstains Bars length to the Eastwards of the smallest Valley, according as is shewed in this Figure, then it is time to cast about; and when you run over to the Westwards, towards *Ushant*, that the foresaid Abby of *St. Matthews* cometh a little without the Point of *Conquet Haven*, you must also cast about; for when the foresaid Abby cometh two ships-lengths without the foresaid Point, then are you close by the *Hagbels*. The Norther and the Souther *Hagbels* lye about a shot of a cast Piece distant one from the other. Two or three Cables lengths thwart of the Point of *Conquet Haven*, or *Conquet-Oort*, lyeth a sunken Rock, which with a spring-tide cometh above water, called the *Vintner*, by the *French*, *Le bell*. If you sail into *Conquet Haven*, then run about the Point within a Cables length, as is aforesaid, until you see the Haven open, then you come against the *Fenistieres*, which are Rocks that lye off about a Cables length from the East Land of *Conquet Haven* under water; for to avoid them, run along by the Norther shore until you come within the Haven, betwixt the *Fenistieres* and the *Blanch Moins*, that are Rocks by *St. Matthews*: It is a good Road under the Abby of *St. Matthews*, as well for them that are laid to the Northwards, as to the Southwards: If you will go in this Road, coming from *Conquets-Oort*, then run right with the *Blanch Moins* until the Abby of *St. Matthews* be East South-east from you, sail then towards it until you come before the Abby.

About.

From Ushant to Bayon.

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About a League to the Eastwards of *St. Matthews Point*, towards *Brest*, lyeth a sunken Rock, about half a shot of a Cast Piece from the North shore: If you will sail in *Brest* water, then go from *St. Matthews Point* away East and by South, and East South-east, and keep the North end to the Southernmost *Mullines* without *St. Matthews Point*, so along until that the Mill on the North land come to the Northwards of the Trees, then you sail along to the Southwards of the foresaid Rocks, and so doing you can take no hurt of it; for to sail forth alongst to *Brest*, being past the foresaid Rocks, you must run forth within two Cables lengths along by the North shore. A little within the East Point of *Cordon* lyeth a Raine of Rocks about the midst of the Chanel in the Mouth of *Brest* water, which at low water lie above water, and at high water are under water, called the *Bagine*, you may run along by both sides of *Bagine*, it, but on the Norther side of it is best; when the *Brest* cometh without the Point, sail then so right to it, you must ankor to Seaward in eight or nine Fathom; and with the Cable ashore fast on a Tree: When you come within the *Bagine*, you may edge up toward the Eastwards, or to the Southwards, before the River of *Laderneau* or *Lefou*, and Ankor under the South *Lefou* land in ten, eleven, twelve or thirteen Fathom, before the little Town old *Croydan* *Brest* water, or the River of *Laderneau*; he that is bound in there, may take a Pilot to bring him in where he desires to be; it floweth there with an ordinary Tide, three Fathom up and down; a South-west and West, and North-east and by East Moon maketh there full Sea. If you come to Ankor within *Brest*, you must pay for Ankoring ten *Soubs*, and for it you shall get a Ticket of Freedom; if it should happen that you should lose your Ship upon *Bretaigne* you might therewith challenge your Goods, or else they are unfree. *Bartrams Bay* lyeth two Leagues to the Eastward of *St. Matthews Bay*. *Point*, a little League past the afore said sunken Rock; there is good Ankoring for a North, and North-east wind in ten and eleven Fathom. Over against *Bartrams Bay* lyeth *Cro:dan*, *Croidan*. from *St. Matthews Point* South-east, distant about three Leagues, a great Bay. The *Mullines* are the Rocks which lie to the South-

The Coast of France,

wards of *Ushant*, and the Westwards from *St. Matthews Point*; betwixt them and *Ushant* lieth a Channel North-east and South-west, through there remaineth, at low water, six or seven Fathom water; he that cometh from the Northwards, and cannot saile a weather of *Ushant*, and the *Mullines*, by reason of the flood, may run through here; or he that cometh out of the Sea, and with Northerly winds cannot saile a weather of *Ushant*, may with a flood run through here, and so farther his Voyage; when men run through here, either in or out, and keep the midst of the Channel between both lands, can take no hurt.

From *St. Matthews Point* to the Race of *Fontene*, or the *Keyser* and *Lavender*, the Coast is, South and by East, six leagues betwixt them both ly divers Rocks, whereof men must take good heed, as the Hen with the Chickens, the Collier, the Faulknors, Scheminckelborrows, the Hen with the Chickens, [the Collier] and the middlemost Faulkner. lye from *St. Matthews Point* South-east and by East, distant a league and a half, the Collier lieth from *St. Matthews Point* East-south-east also a league and a half, the Scheminckelborrows lie to the Southwards of the Faulknors, men may run through betwixt them in ten fathom to the Point of *Croydon*, there is good Road and Anchor ground.

Race of
Fontene.

The Channel of the Race of *Fontene* lieth through betwixt the *Keyser* and *Lavender* South-south-west and North-north-east, he that will saile through here must be very careful to cast his tides well; for it runneth most thwart over this Race, so that with a South-west wind and an out fall, or ebbe, and also with ealmes, it is very dangerous to come into this Race.

Seams.

A little to the Southwards of the *Keyser* lieth the East end of the *Seams*, and lie from thence, at least, three or four leagues West-north-west into the Sea. A great league North-west from the West Point of the *Seams* lieth a Souncken Rock whereof men must take good heed. West-south-west about two leagues from the *Seams* lieth a row of Rocks like a Bank, whereupon it is not deeper than seven fathom, but betwixt the Rocks and the *Seams* it is fifty fathom deep.

Broad
Sound.

Betwixt the *Seams* and *Ushant* the Broad Sound lies in East-south-

From Ushant to Bayon.

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South-east to *St. Mathew's Point*, and from *St. Mathew's Point* West-south-west five leagues into Sea to the Eastwards of *Ponteny*, or the *Laender*, lieth the *Frixebay*, three men may anchor for a South-east and East wind, and good Anchor ground: to the Eastward of the *Frixebay* lieth *Bold-dauids Bay*, a broad deep Sound, lying into the Land East-north-east, again the East side of that Haven lie two little Islands, or Rocks, where men may anchor round about them, and lie sheltered for all winds.

From the Race of *Ponteny* to the *Pens*, the Course is South-east somewhat Easterly about ten or eleven leagues, between them both lieth *Old Tarn*, a good Haven, about seven leagues East-south-east from *Ponteny*: From *Old Tarn* to the *Pens* it is South-east and by South, the West end of the *Seams* and the *Pens* lieth South-east and by East, North-west and by West, distant about thirteen leagues: from *Old Tarn* to the *Pens* lieth the Coast South-east and by South five Leagues.

The *Pens* are very easie to be known for him that hath seen them once: Upon the South-east end standeth a thick flat Tower, a little to the Westwards of it standeth a sharp Tower, and somewhat more to the Eastwards against the high Land standeth a Village, appearing like a Castle; upon the East side thereof standeth a flat Tower, and there close to the Land lie two great Rocks. The *Pens* lie off from the Main land South-east two leagues into the Sea: for to faile in there you must come in there from the Eastwards, and run alongst by the Strand of the Main land, leaving all the Rocks on the Larboord side, until that you come to a great Rock which you must leave on the Starboord, and run about to the Southwards off, being past it, edge within up towards the North-west, and you may anchor there a little within, in three fathom at low water; lying there you can see no Sea, but at high water the Sea cometh very much tumbling in through the Rocks: You may go away from thence at high water South-east through the Rocks into Sea, but you must take very good heed, because it is there full of Rocks, whereof some are above water, some under water.

From the *Pens* to the *Glannons*, or *Glanant*; the Coast is East-south-east, with that Course you shall run alongst to the South.

Bindeth. Southwards of them. Within the *Glanans* lyeth a Haven called *Bindeth*, at the East point of that Haven it is full of Rocks. For to saile in there you must take heed unto these marks; there stand two miles far within the Land, bring the Eastermost of the two over a little Castle, that standeth upon a Point within the Haven, keeping them so North and North east and by East, and so run in without danger. A League South-west from *Glenant* by the Eastern Pen-marks lieth a great Rock under water, but it is good to be espied, in regard the sea always breaketh upon it, as well within as without this Rock it is forty fathom deep.

Muttons Islands. When you come off from the *Pens* with an East and South-east Course, you shall run alongt far enough to the Southwards of it, about two leagues to the Eastwards of *Glenant* by the Islands of *Muttons*, you may saile through betwixt them and the Main Land; unto *Gray* or *Blavett* also you may anchor within them in ten or twelve fathom betwixt the Land and the foresaid Island, which are cleane upon the North side from *Mutton* to the Island *Gray*; the Coast is East and by South, upon the outer side of *Gray* stand three or four Mills, the East end of it goeth steep down, and the West end sloping and flat down, thereby it is good to be known: under *Gray* is good anchoring for a South-west wind in six and seven fathom; at the Southwest end runneth off a foul ledge, whereof men must take good heed.

Blavett. Within the Island *Gray* lieth the Haven of *Blavett*, which lieth in about North-west in four or five fathom. Upon the West side of this Haven standeth a high sharp Tower called *Quinperly*, from the East point lieth off a great Ledge of Rocks called the *Bears*, within it on the East side of the Entry of the Haven lie two Sounken Rocks, also on the West side a rock with a hole, which at half ebbe is uncovered, whereof men must take very good heed: in their coming in men run in alongt by the West land for to shun the foresaid Sounken Rocks and foul grounds.

Road to know Bell Isle. From the *Pens* unto *Bell Isle* the Course is East-south-east twenty leagues, but from *Gray* to *Bell Isle*, it is South-south-east five leagues. *Bell Isle* hath at the North-west end a steep point lying out with a great saddle, thereabouts stand also some little houses; and the end goeth very steep down, when as *Bell Isle* lieth

lyeth North North-east from you; the West End sheweth it self in three parts, the Westernmost whereof is a great Rock, which floweth at a very high water almost under; at the East End there divideth it self off also a great Rock, where, with these Marks above prescribed, it is indifferent well to be known. Men may see *Bell Isle* out of the Sea in fifty five Fathom; on the South side lie off many Rocks, and little Islands; if you will seek a Road under *Bell Isle*, then you must give the North Road under west end a good birth; off from it lyeth a sunken Rock under water, a good ways from the Land; being come within it, sail then within two Cables lengths alongst by the Land; within a Bay shot, about by the North Point, before you come before the Village with a little sharp Tower, called the *Pauls*; there standeth a Castle on the Point to the Westwards of the foresaid little Tower; Ankor within that Point in nine or ten Fathom, there you shall lie Land lockt for a South South-west and North-west Wind; if it blow more Northerly, you must shift and run before the East End (which is about half a League broad) and Ankor there in ten or eleven Fathom: This Island lyeth about South-east and North-west; according as the wind bloweth Men do shift from one Road to another; it is there every where good Riding; Souther within the Island *Bell*, to wit, betwixt the Main Land and *Bell Isle*, lie many little Islands, where at divers places Men may sail through to the Rivers of *Kantes*, or *Morbeaux*, *Roche Barnard*, and the River of *Nants*, called the *Loire*: Of these Islands are three; the principal Eastermost is called the *Cardinal*, the East Point whereof, and the East Point of *Bell Isle*, lie one from the other direct East and by North, and West and by South, about four Leagues; the middlemost is called by some also the *Cardinal*; Men may run all alongst by the *Cardinals*, either by night or day, in eight, nine, and ten Fathom, all clean sandy ground; the East Point of the *Cardinal* and the Entering of the Haven of *Morbeaux*, lie North North-west, and South South-east, one from the other; from the East Point of the *Cardinal* to the River of *Roche Barnard*, the Coast is right North east. Betwixt the River of *Roche Barnard* and *Nants*, lyeth *Old Downs*, *Old Downs*, *Croswick*.

Old downs. *Croswick* and *Poolgem*, the Land of *Old Downs* lyeth to the North-wards of the *Elat Church* upon the high land *Poolgem* is a Village to the Eastwards of *Croswick*, with a high sharp tower; if you would saile from *Bell Isle* to the River of *Nants*, then go away from the East end of the *Cardinal*, or from the Easternmost Rocks that lie off from the *Cardinal*, directly East-north-east towards the West point of *Croswick*, for to saile a weather of the *Four*, which is a great bank which at some places falleth dry at low water, so along until it begin to shoul; and that at the sharp tower of *Poolgem* cometh against the highest of the East point of *Croswick*, then you run alongst to the Northwards of the fore-said Bank, go then East-south-east, or according as the wind is, East and by South, and East-south-east, unto the Rock with the Hole called *Pierre Perce*, but so that you come not very neer (at low water) the Land somewhat to the Westwards of *Poolgem*; for it is not clean alongst by it, betwixt the *Four* and the point of *Croswick* it is in the fair way eight, nine and ten fathom deep, when you come neer the Rock with the Hole, then run along to the Northwards of it, and run in very close by it, leaving it on the Starboord side of you, for to avoid the foul grounds which lie off from the point of *Poolgem*, towards this Rock, close along by this Rock it is four fathom deep; being past this Rock with the Hole, then run all along by the North shore unto *St. Nazaire*, in three or four fathom at low water; but you must take heed of a Rockie Point somewhat to the Westward of *St. Nazaire*.

Pelerin. At *Pelerin* is the Landing place ten leagues from *Nants*, where goods are brought off with Litters to the Ships; but from *St. Nazaire* to *Nants*, or *Pelerin*, it is Pilots water. For to saile from *Bell Isle* to the Bay of *Armentiers* you must go East-south-east untill you see the Abby of *Armentiers* to the Eastwards of the Trees, which stand within the Land over the same Abby; then go on East and by North, so along until that the Abby come within the Castle of *Armentiers*, then are you within the *Monks Dreg*, then go on East-south-east until that you be within the Rock of *Pierremou*; you may go about it on both sides, and when you can see the *Grave* open, then you may anchor in

in seven or eight fathom, and go ashore to fetch a Pilot. From *Armentiers* to *Use*, or *Heys*, it is South and by East seven leagues, and from *Bell Isle* to *Heys* South-east sixteen leagues.

The Island of *Pickeliers* lieth right before the point of *Armentiers*; upon *Use* or *Heys* standeth a sharp Tower, and some little houses, and Mills; whereby it is very easie to be known. *Heys or Use.* From *Use* to the *Killians*, or the Ile of *St Martins*, the Coast is East-South-east twelve or thirteen leagues; betwixt both lyeth the Bars of *Olone*, about half a league off from the Land of *Poixton*, East and by South seven leagues from *Use*, in the right fair way, and in regard there is nothing but Rocks and Stones, it is not good to come neer them in dark weather.

From *Olone* to the *Killians* the Coast lyeth most East-south-east five or six leagues; for to saile into the *Killians*, which is alongst by the Northwards of the Island of *St Martins*, you must go in somewhat Northerly, leave two third parts of the Channel towards *St Martins* Island, and another third part towards the Main Land; along by the Island of *St Martin*, it is uneven and somewhat full of Banks; go in along, as before is said, until that the Church of *St Marrin* be South-south-west from you, then you shall be past the Bank, which lyeth North of *St Martins*, and lyeth off from the shore somewhat Westward of *St Martins*; before *St Martins* you may anchor four, five, or six fathom. *For to saile into the Killians.* *Marks of the Bank before St Martins.*

The marks for to keep the deepest water when you run over the Bank are these: Keep the great Tower of *Rochell* a hands spike length to the Southwards of the Wood, or Trees which stand upon the Northermost high Land, and run so over the Bank, it is there all soft ground. If you will anchor before the Abby within the Bank, then run in six or seven fathom, and anchor there: But if you will not anchor under *St Martins*, but will saile towards *Burnt Island*, then bring that little Tower of *Luscher* over a little House that standeth upon the little Island *Ucke*; and keep it so standing; then you can take no hurt of the *Laverdin*, which is a rane of Rocks, lying from the East side of *St Martins* point about an English mile, and at low water are uncovered; when you come by the East end of *St Martins* Island,

Island, and are bound to *Rachel*, or else you will Anchor under the *Bosse*, bring the great Tower of *Rachel* a ships length without the *Bosse*, so you can take no hurt of the *Laverdne*; you may Anchor under the *Bosse* in five or six Fathom soft ground.

If you will sail into the River of *Sherrant*, then run about to the Southwards of Burnt Island; you may also sail about to the Northwards of it, and sail in by the Tower of *Vorne* or *Four*, at low Water the River falleth dry at least four Leagues from the Land; but to sail from Burnt Island to *Burwage* you must sail away South South-east, and keep the little Tower of *Heers* to the Westwards of the Wood, so along until the Tower of *Vorne* come over a little red tiled House that stands on the East side of the River of *Sherrant*; sail in then South-east, and a little South-east and by East.

Banniard.
Oleron.

The *Banniard* lyeth along the Land of *Oleron*, and lyeth until within Burnt Island, at low water it is uncovered, the Tail of it lyeth far to the Northwards: At the South end of *Oleron*, betwixt *Oleron* and the Land, to the Southwards of it, is yet another Channel, where Men may sail in and out, called the *Mamne Sound*, deep enough for great ships, it lyeth in from out of the Sea East and by North, being come within, there runneth a River toward *Sales*, where Men do Lade Salt; being past that, to the other Point of *Mamne Sound* lyeth a Place whereof Men run to the Northwards: Upon these Marks you must keep the Mills standing upon the Land of *Oleron* over the Trees, so you shall run to the Northwards of the Place: There is the Road for them that Lade Salt for *Oleron*.

Mamne
Sound.

From the Band or Cragg of *Oleron* to the Tower of *Cordan*, or the Pole Head, or the Mouth of the River of *Bordeaux*, the Land lyeth South South-east, and South and by East, thirteen Leagues. To the Northwards of the Mouth of the River of *Bordeaux*, lie five or six high white sand Hills; but to the Southwards of it, it is somewhat low Land, black little sand Hills being overgrown with spiry grass. From the Tower of *Cordan* off to the Northwards, towards the high sand Hills, lyeth a sand Bank called the *Piper*. From the North Point of the River, runneth off to the Southwards a Sand called the *Nor-*
sher

ther *Asses*, and to the Southwards of it lyeth another Sand ^{Norther} called the *Souther Asses*, through betwixt them both, and also ^{& Souther} along to the Southwards of them, Men sail into the River. In ^{Asses.} this aforesaid Channel, through betwixt the *Asses*, remaineth at low water three fathom water upon the shoalds.

For to sail into the River along to the Southwards of the *Asses*, coming from the Northwards (that is the best Channel) bring the Tower of *Soulack* East from you, or somewhat more Northerly, and sail in so right with it until the Tower of *Cordan* be North and by East, and North North-east from you; *Royan* shall then stand North-east from you; or else, if you will come from the Southwards, then bring the Tower of *Cordan* North and by East, and North North-east from you, and sail in so right with it until *Soulack* comes to be East from you, *Royan* shall then stand North east from you; sail then right towards it, and coming near it sail to the Point of *Messie*: when you are now within the Rivers Mouth, and come right against the Point of *Messie*, that is the Point where the Mills stand upon, then edge over towards the broken Castle called *Chastillion* South-east and by South, that is eight Leagues from *Chastillion* *Messie*, and then forth in along by the South Land, South-east in unto *Pouliack*, which is two great Leagues.

When you are before *Pouliack* and will sail to *Bloye*, let the *Pouliack* water first flow an hour, and then you may well go over with a ship that draws nine or ten foot water. The Marks for to sail in the deepest water of this Reach are these; there standeth a Mill half way betwixt *Bloye* and *Rocktaw*, keep that without the new Wall of *Bloye*, then you shall run in the deepest of the Channel; it is in the fair way almost all along five fathom deep.

Before *Bloye* it is three or four fathom deep, run then along *Bloye* by the North Land in three, four, or five fathom; when you come before the River which lyeth up to the Eastwards, called *Dordaign*, then sail first right with the midst of the second Island, and leave it on the Star-board side, and go indifferent near along by it, until you be over against or past the Gallows which standeth upon the East Point of the River, and then

The Coast of France,

again along by the North land unto the four little Houses; from thence you must edge over to the high Tower of *Dublot* or *Pidgeon-house*, coming thwart of it, you must presently edge over again to the East side to the height near *Lermont*, in that edging over, you shall run through betwixt the Stone Bank and the Lar-board side, and a Shoald Sand Plate on the Star-board side over a Bank called the *Pace*, which is the shoaldiest of all the River; there remaineth at low water little less than a Fathom.

The Pace.

Being come over the *Pace* to the East side, go then in along by the East shore, until you be past *Lermont*, then sail again over to the West side, right with the houses of *Charter-house*, and then in all along by the West shore, until you come before the Town of *Bordeaux*; in that crooked Reach betwixt *Lermont* and *Charter-house*, it is five, six, and seven Fathom deep, and before the Town four and five Fathom deep.

When Men will sail out of the River *Bordeaux*, they must stay at *Royan* until they have good weather and a fore-ebb to run out with; in the running out keep the high Sand Hill North North-east from you, so long until the Tower of *Cordan* be South east and by East from you, then you may sail out through the *Asses* North-west and by West into the Sea.

Anchises. From *Cordan* or the River of *Bordeaux* unto *Arcaſon* the Coast lyeth South and North Twenty Leagues, it is all low sandy Land; betwixt them both lyeth a Tide-Haven called *Anchises*, Men may go in there well at high-water with great ships.

Arcaſon. From *Arcaſon* to *Bayon*, the Coast lyeth South and North sixteen or seventeen Leagues, the Rivers Mouth of *Bayon* lieth in between two plain Strands, East South-east, and East and by South, and sometimes more Easterly or Northerly, by reason of the shifting and altering of the Sands before the Rivers Mouth. Upon the Sand of the South side of the Channel standeth two Maſts, these you must keep one in the other, or the innermost a little to the Northwards of the outermost, and run so in over the Bar, or shoaldiest place, until you come against the South Point, and then in a long by it; upon the aforesaid

Bar.

From Ushant to Bayon.

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Bar is at high water and spring-tide at least three Fathom, with an ordinary Tide two Fathom and an half, but at low-water no more than three Foot water; this Bar, and this River, is Pilots water.



The Courses and Distances of the Streams.

Vithout Ushant a West South-west and East North-east Moon, and within the Trade a South-west and by West Moon maketh a full sea.

In the broad Sound between Ushant and the Seams a West South-west and East North-east Moon maketh the highest waters: The Flood falleth very strong upon Ushant, and to the Southwards of it through the Mullens.

In the Race of Fosseney a South-west and by South and North-east and by North Moon maketh full sea: The Flood falleth very strong through between the Keyser, somewhat thwart over-towards the Lavender, with very great rippling over the Calf (that is the Ledge of Rocks which lieth off from the Lavender) and from thence forth North, and North and by West, inwards to St. Matthews Point.

On these Lands, as on all the Coast of Britaigne, Poitou, and Gasgoine, a South-west and North-east Moon maketh high-water, but within the Havens about a Point or two later, according as they lie far within the Land.



Of the Depths about these Places.

THe Backovens, or the Land of the Fourn, Men may see in fifty Fathom.

Ushant:

The Coast of France,

Ushant being about South from you, you may see in fifty Fathom.

In the broad Sound it is forty five Fathom.

Bell-Isle Men may see from below in fifty five Fathom, but under the top in sixty Fathom.

West South west from *Mues*, about nine Leagues, you shall find Forty five and Forty six Fathom; the Ground is full of fine small Stones as great as course sand and very steep.

St. Martins Island and the North end of *Oleron* Men may see in Twenty eight and Thirty Fathom. When Men get sight of *St. Martins* Island, they shall see upon it a high Tower, with a high House, and upon the Strand a Mill with four or five high sand-hills. Upon *Oleron* Men shall see a high spire Tower upon a red Point, where Men shall see some Trees stand over it, and to the Southwards of it is at two or three places ragged sand-hills.

The Land against the River of *Bordeaux* Men may see from the Poop in Thirty Fathom, and the Tower of *Cordan* in Twenty seven Fathom.

Betwixt *Arcason* and *St. John de Luz*, Men may see the Land in Thirty Fathom, when about *Bayon* they shall see *Cabritton*, *Bayon*, *Bedert*, and *St. John de Luz*, almost all flat Towers.



Of the Latitudes.

| | |
|------------------------------|-----------------|
| <i>Ushant</i> lyes in | 48 deg. 30 min. |
| <i>Bell-Isle</i> | 47 deg. 05 min. |
| <i>Island Use</i> | 46 deg. 44 min. |
| North Point of <i>Oleron</i> | 46 deg. 10 min. |
| Tower of <i>Cordan</i> | 45 deg. 36 min. |
| <i>Arcason</i> | 44 deg. 40 min. |
| <i>Bayon</i> | 43 deg. 46 min. |

For the Course and Distance, see the *Pilots Sea-Mir-
rour*, pag. 37, 38, 39, 40.

How

How these Lands do show themselves at Sea.

How

When Ushant is S. and by W. from you four leagues, it sheweth itself in this form.

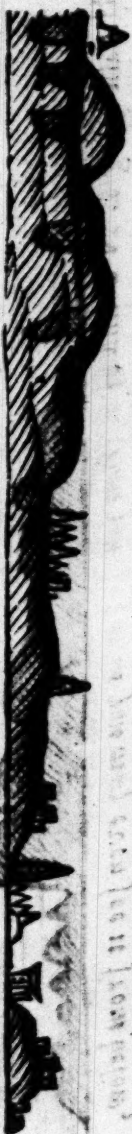
Ushant being S. and by E. from you 3 leagues, sheweth itself thus.

Fontenay.

Oldyarn.

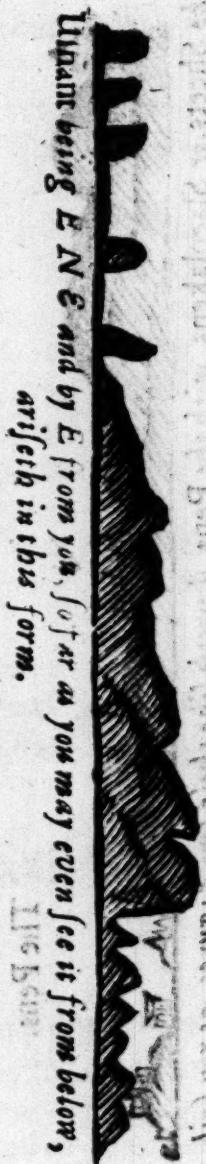


The Pens.

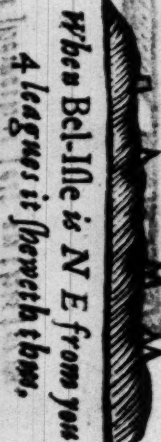


The Sheets, or Slacplakens, with the Pens, sheweth like these two Figures, as you sail along by them, and that they are about 4 leagues from you.

How these Lands do shew themselves at Sea.



Thus sheweth the West point of GROU, when it is 3 or 4 leagues N E from you.



How



Heys being North east from you, sheweth thus.

La fos de Loys.

St. Marten.

Abby.

St. John.

When Men sail out or in at Porthus, St. Martens Island sheweth it self in this form.



When you are before Porthus, about two or three leagues from land, then doth Oleron and Olderdon arise in this form.

Cabritton.

Bayon.

St. John de Luz.



Fonteravia. Passage.

St. Sebastian.



The Land about the Bight of St. John de Luz, off from Cabritton will past St. Sebastian sheweth thus, as is demonstrated in the two foregoing Figures.



XIV DEMONSTRATION.

The Coast of Holland: How Men shall Sail from Amsterdam to Urck (about Enchuyser-land) and from Enchuyfen to the Cripple and Creyl.

From the Buoy to the *Cripple*, which lyeth upon the East end of the *Cripple-sand*, three fathom, unto the Beacon upon *Cripple-sand*, the Course is North-west and by West, and North-west. When *Lutkebrook*, a small Spire Steeple, cometh to *Hem* (which is also a Spire Steeple) then are you thwart of that Beacon. From the Beacon upon the *Cripple* unto the Souther Buoy upon *Wieringer-flat*, the Course is Northwest and by West, or West North-west, according as the Wind and Tide shall be; it lyeth at high-water with an ordinary Tide in thirteen foot and an half; the Marks thereof are these, *Grootebrook* cometh betwixt two Hay stacks to the Eastwards of the five Watermills which stand to the Eastwards of *Warvers hoofst*, that is a long Mark in the f. *Twisck*, a sharp Steeple to the Westwards of *Medenblick* cometh over *Almerdorp*, there was wont to be a little flat Steeple, but it is fallen down, and therefore now so good not to be known, that was a right thwart Mark. Upon *Wieringen* standeth

eth a Cape, bring *Eastlander* Steeple upon *Wieringen*, right over the Cape, and sail so right with it, and you shall come right with the Buoy. When you are at the Buoy, *Westlander* Church cometh then over *Cleaversteer*, and the eight Mills to the Eastwards of *Medenblick*, a little without the Town. For to find the deepest of the Flat, coming from the *Cripple*, you must be careful to look out for the foresaid Marks. If that *Twisck* come first to *Almerdorp*, before *Cleaversteer* come to *Westlander* Church, then you are too near to *Breer-sand*, of the Grounds on the Starboard side, these are sure Marks for to sail over the Flats, when there lye no Buoys. Alongst to the Eastwards of the Buoy is the deepest water. If you will Ankor before the *Wieringer* Flat, then come no nearer the Flat than when *Twisck* cometh a little to the Northwards of *Op-perdoes*, or half ways betwixt *Op-perdoes* and *Almerdorp*.

For to sail from the foresaid Souther Buoy over the *Gammels* *Gammels*. to *Medenblick*, you must bring the Westermost Watermill of the eight (which stands to the Eastwards of *Medenblick*) a Capstain Bars length without or to the Eastwards of the Bulwark of the Town, and sail then boldly without fear right in with them, until that you come into the Road where the ships commonly lie; or else, if you desire to go into the Haven, then sail in right to the Norther-head, there is nothing that can hurt you. But if you must turn to Windwards over the *Gammels*, and that your ship draweth more than eleven foot water, so run no further over to the Westwards, than that the foresaid Watermill cometh almost within or a handspikes length to the foresaid Bulwark, so that yet you may well see through betwixt them, then cast about, and run over to the Eastwards, so long until *Grootebrook* come in the five Watermills, which stand to the Eastwards of *Warmers-hoof*, or on the Eastward of them, so you shall not do amiss, for it is there broad and wide.

If you desire to sail over the *Gammels* to *Medenblick*, when *Meden-* you come from the *Elve*, then bring the Steeple of *Op-perdoes blick*, over the Westermost Watermill of five, which stand to the Westwards of *Medenblick*, and run in so right with them,

until that the Westermost Watermill of eight (to the Eastwards of *Medenblick*) come to stand a Capstain Bars length without the Bulwark, as here before once already hath been said. Having these Marks thus, and that it do become dark, then go on South and South and by East, according as the Wind and Tide shall be, and you shall not do amiss, neither shall you miss the Town; in this foresaid fair Way, there is no less depth than upon the *Wieringer-flat* and all soft ground.

Twisck.

When the Steeple of *Twisck* is over the Westermost Watermill, except one of five, which stand to the Westwards of *Medenblick* and *Groote-brook*, in the little Village to the Eastwards of the five Watermills, on the Easter Dyke, then are you in thirteen foot from the Northwest point of the *Cripple*. Upon these foresaid Marks, and thirteen foot, lyeth a Buoy with three Leagues, and on the foresaid West Shore lye three drift-Beacons in twelve foot, and then cometh the Westermost Watermill of the eight, which stand to the Eastwards of *Medenblick*, and you shall not have less water than upon the *Wieringer-flat*.

From the Souther Buoy to the second or Middle Buoy, the Course is North-west, and North-west and by North; but for to find the deepest water, go first North-west, so long until that *Ypels-hoofs* Church come over the Watermill which is called the *Bolmill*, and then forth North-west and by North. When the Cornmill upon *Wieringer-flat* cometh in the swamp of the *Oever*, then you have the length of the second Buoy, which lyeth upon the West or the South end of a little Plate, called the *Reppel*; the Fair Way is along to the Westwards of it, there being at low water two fathom large, and at high water scarce three fathom deep. On the West side of the Fair Way, betwixt the Souther Buoy and the Middle Buoy, nearest the Middle Buoy, lyeth a hard Sand called the *Sow*, which is on the East side very steep and needle, to which (in sailing up) Men might sail within a point or tail of it: To the Westwards of it shooteth off another Tail to the Northwards, a great ways towards the Northeast Buoy. Upon the outermost or Northermost point, called *Seng-oort*, standeth always

a Beacon. Upon *Wieringen* upon the *Oever*, standeth two *Wieringen*. Capes with Barrels on them, the one upon the North end of the *Oever*, and the other upon the head; they are so little that you can hardly see them, when you come off the Souther Buoy towards the Middle Buoy, then keep them not one in the other, for if you keep them one in the other, then you will be very close by the South Shore, and shall but even run clear of the *Sow*; but keep the southermost a little to the westwards of the northermost, and then you shall run along the right Fair Way, and shall not take any hurt of the *Sow*. When you come near the Middle Buoy, you must leave these Marks, and use them then no longer.

The Middle Buoy.

From the Middle Buoy unto the Norther Buoy, then cometh *Oostlander* Church and the Cornmil, both over a little Chappel covered with red Tiles, that stand upon the *Oever*, thwart of it also standeth the foresaid Beacon upon *Seng-dijk*. *Seng-dijk*. By the Norther Buoy it is scarce three fathom deep at high water, the Fair-way is along to the westwards of it. When you come by the Norther Buoy, keep still the foresaid North North-west Course, until that *Oostlander* Church come to the northwards of the Sedge-dyke of the *Oever*, and then you are past the little Plate.

When as the *Oostlander* Church cometh from the Sedge-dyke, go then North and by East on to the *Nesse*. In that Fair-way it is broad and wide; the West Shore all along unto the *Nesse* is very flat, there you cannot take any hurt, but may boldly run along by it, although it were a Lee-shore; but the East Shore is steep, especially somewhat further out towards *Jaep-vuer*. When the great Cape from *Wieringen* standeth a great Ships length to the Eastwards of the houses upon the *Oever*, then you are well to way, and right into the Fair-way, betwixt the Norther Buoy and the *Nesse*. When you then shall see that *Ipels-hoof* and *Sern* are the one in the other, there is the Road where

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where Men do unlade, you may Ankor there about in the midst of the Fair-way in four fathom, the nearer the East Shore the deeper. *Jalp vaer* is a Tail of Sand or Plate fast to the East Shore, which you might sail within, when you sail upwards in six or seven fathom: Upon it lyeth a black Buoy.

The Nesse. Upon the Point of the *Nesse*, over against *Jalp vaer*, lyeth a white Buoy: These lye both in three fathom and an half. In the Winter, when the Buoys are taken away, then in place of the white Buoy, there is set a Beacon upon the *Nesse*. From the *Nesse* to *Vogel-sand*, the Course is most North-west, therefore when you have got the length of the Buoy or Beacon upon the *Nesse*, go then more Westerly, North North-west, and North-west and by North, and North-west, unto the Beacon upon *Vogel-sand*: The West Shore you may sound in six and seven fathom. The Marks of this Reach are these: The Mill of *Ooster-end* (which is a little Village upon the East End of *Texel*) and the Cape that standeth upon the Dyke, one in the other, then you are amidst the Channel in the deep that is ten, eleven, and twelve fathom: When the Mill standeth somewhat to the Southwards, or to the Westwards of the Cape, then are you by the South Shore, which is very steep, which (in turning to windwards) you may not come nearer than in eight or nine fathom: But being past *Vogel-sand* it groweth shoal drier, and the East Shore very steep. As soon as you find that it beginneth to shoal, you must cast about, else you should presently be on again the East Shore.

Vogel-sand. From the Beacon upon *Vogel-sand*, the Course is West North-west unto the Buoy upon *Bang-sand*, which lyeth upon the Tail of the *Shore*: The Marks of it are, the *Eyerland* even upon the East Point of the Island *Tessel*, and the Church of the *Horn* upon *Tessel* to *Zuydhassel*, which is a few houses to the Northwards of the *Sconce*. Or else when you come about *Vogel-sand*, then keep the foresaid Cape and Mill one in the other, until that the foresaid *Horn* come to or through *Zuydhassel*, and then run on keeping them so: When that *Eyerland* cometh even to the East Point of *Texel*, then you have the length of the Buoy upon the *Bang-sand*, you may bring the *Horn* well somewhat to the

the Northwards of *Zuydhuffel*, but in no wise to the Southwards of it, for else you should sail on against the South shore. For to sail from thence to *Coop vaerders Road*, you must keep the *Horn of Zuydhuffel*, and sail forth keeping them so until you come against *Texel* in the Road, and Ankor there where you think good. Before *Ooster-end* it is best for small Ships, there it is shoald water, and there goeth little Tide, but most Ships do Ankor before the *Geest*.

Upon the Point of the *roße* lyeth a white Buoy in three fathom, on the West Point of the *Balgh*, which you must leave on the starboard side, and run about to the Eastwards of it into the *Balgh*, and then forth along by the beacon to *Wieringen*, you must leave all the beacons also on the starboard side.

For to sail from the *Coop vaerders Road* out at *Texel*, you must go first South-west, or somewhat westerly, to the *Helder*, or run along by the *Texel* side in nine or ten fathom, until you come near the *Helder*, and go out West, close along by the shore of the *Helder*, and by little and little somewhat more Northerly, until that the Capes upon *Huyfdown* be to one in the other, or that greatest come through the smallest, to wit, to the Westwards of it, and then go out North North-west, or more Northerly, according as the Wind or Tide shall be, until you come against the North shore, in five or six fathom, and run boldly out along by it, until that you be clear out at Sea.

When the Tower of West-end (which Men do name the Wester-end of *Wambus*) cometh to be East North-east from you, or a little more Easterly, you shall then have the length of Cape and Steeples buoy, that is the innermost buoy of the *Spaniards Channel*, which you shall espy on the starboard side. To the Northwards of it lye three other buoys, all along the East side of the *Keyfers Plate*, near upon one Course, to wit, North North-west, or a little more Northerly, which you must leave (in sailing out) all on the starboard side. The outermost buoy lyeth from the fourth North, or somewhat Easterly: Upon the Point of the *Keyfers-plate* in two and twenty foot, at low water, you may run along to the Westwards of it,

it, but not far, for the *Keyfers-plate* is on the East side unto the outermost end very steep, but the East shore of the deep it is flat. When you come thwart of the foresaid outermost buoy, then lyeth the *Kooger Church* right East North-east from you, and the *Capes upon Huydown* are one in the other.

*Spaniards
Channel.*

For to find *Spaniards Channel* coming from the Northwards, you must bring the *Capes upon Huydown* one in the other, or a little through one another, to wit, the *Runner* that is the southermost and greatest, a little to the Eastwards of the other, then they shall stand South South-east from you, sail then right in with them, keeping them so, and you shall sail right upon the outermost buoy, or in sight of it, which lyeth, as is said, upon the Point of the *Keyfers-plate* in two and twenty foot at low water: When you come to the buoy, the *Kooger Church* shall lye due East North-east from you.

Therefore if you come from the Westwards or the Southwards, then bring that Church no more Northerly than East North-east, but rather a little more Easterly from you, and sail then right with it, until that the *Capes* come one right against another, or else you should lightly sail upon the *Keyfers-plate*, which is without upon the North side very steep.

Men may run along to the Westwards of the outermost buoy, but not far, along to the Eastwards of it, it is broader and wider.

From the first, or the outermost buoy, to the second, the Course is South somewhat Westerly, and from thence to the third, fourth, and fifth, which is the buoy of the Cape and Steeple, it is almost one Course, South South-east or somewhat southerly, the buoys lye all on the West shore, Men must needs sail along to the Westwards of them, but not far, for the West shore is so steep, that if a great ship should lye with the Stern against it, there should be a Head no more than three foot, and by the Main-mast at least three fathom deep, but the East shore is flat, Men may run along by it upon your Lead, until they come within the buoys. The buoy upon the Tail, that is the innermost buoy of the *Slenk*, lyeth from the buoy upon

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upon the Cape and Steeple, South and by West, and South south-west, but the Helder South east. Men may sail from the buoy upon the Cape and Steeple right with the Helder without danger, or to the buoy upon the tail, and from thence along ^{The Helder.} by the South shore, which is also very steep, or right to the Helder, according as shall be best convenient for the wind and tide. The foreflood falleth very strong over the ground North-north-east to the Spaniards Channel, until half flood, and the fore-ebb to contrary South-south-east, until half ebb. The Helder lieth from the buoy upon the tail East south-east and S. e. and by e. When you are come neer the Helder, run close along by it, for to avoid a rail, which shooteth off from Geest-sand, which you might sail within, when you come in out of the Sea, there lieth a buoy upon it, which you must leave on the larboard side, being past the Helder, go North-east, or somewhat more Easterly, or along by the Tessels side in eight or nine fathom, unto the *Coopvaerders Road*, the *Wieringen* side is steep.

In the *Slenk* lie six bnoys, the innermost lieth upon the tail ^{The Slenk.} of the *Keyfers plate*, West North-west from the Helder. For to sail out at the *Slenk*, you must run along to the Southwards of it, and leave it on the Starboard side, and go out West, and and West and by South to the second and third buoy, from the third to the fourth and fifth West South-west, the sixth or outermost lieth a little more Southerly.

For to find the *Slenk* coming in out of the sea, then bring the Cape upon the Island *Texel*, and the *Westen*, that is the steeple of *Westeynder Church*, which men do also name the *Wambus*, one in another, then they shall stand a little more Northerly than East North-east from you, sail in so right with them, and you shall run in sight of the outermost buoy, which lieth from the *Kiickdown* West North-west, and West from the Helder. If you come from the Northwards or the Westwards, and will go in at the *Slenk*, then bring the *Kiickdown* East ^{Kiick-down.} South-east from you, or the great Cape upon *Huyfdown* in a little valley, a little to the Northwards of the *Kiickdown*, to wit, betwixt the *Kiickdown* and *Cane Neles* house, sail then so right in with them, until that the Cape upon *Tessel* and the *Westen*

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are one in the other, then you have length of the outermost buoy, and shall not miss to meet with it, which lyeth in four fathom at low water. Keep that Cape and Steeple one in so right with them all along until past the third buoy, which lye all, like as also the fourth and fifth, in the midst of the Fair-way, but along to the southwards of it is deepest, the south shore is very steep, so that having one cast four fathom and an half, the next cast you shall have but three fathom, but the west shore is flat going up. The fourth buoy lyeth from the third East North-east, or somewhat more Easterly. The fourth and fifth East and by North. The fifth and sixth East and by North, and East North-east. The second buoy lyeth at low water twenty or one and twenty foot, upon the shoaldest of the *Slank*, the other buoys lye in four fathom at low water, but the sixth or innermost in three fathom upon the point of the Tail, which you may not sail about to the Northwards of it, but must leave it on the larboard side in sailing in.

The Land-deep.

For to sail out at the Land deep, then run along within a bow shot of the foot Strand in *Huyfdown*, and about by the Heads, and you shall not miss the innermost buoy, which lyeth upon the shoalds, nearest the west shore in seventeen foot at high water, and thirteen foot at low water, that shoaldy place is not above two ships length broad, over it, and also within it, it is deep enough. Thwart of that buoy shooteth off a little Tail from the shore towards the buoy, therefore run close along by the buoy, and leave it on the Starboard side of you in sailing out. Besides that buoy, there lye three other buoys in the Land-deep, which you must leave all lying seaward of you, and run through betwixt them and the shore, when you are come past the fourth buoy, you shall be past the shoalds.

For to find the Land deep from the southwards out of the Sea, you must take the sounding of the shore in four fathom, and run so along by the shore, and you shall sail right by the outermost buoy, and come no nearer the shore, or else you should sail within the Tail of *Arrian Bergers Creek*, which shooteth off to the seawards from the shore, to the southwards of the south Sand-hill. Or else if you come not off the Sea with an open

open wind, then see and keep the great Cape upon *Haysdown* over *Dirkooms* Sand-hill (a little from south of *Kijckdown*) and sail so in right with it, you shall not miss to meet with the outermost buoy, which lieth at low water in four fathom and a half nearest to the Wester-grounds, or to the *Harcks*, leave it on the larboard side, and run along to the Eastwards of it, through betwixt it and the shore, it lieth most North-east, and North-east and by North in, you cannot lightly take hurt on neither of both sides: if you do but take heed to keep you from the shore. *Kijck-down.*

Thwart off the *Kiickdown*, or coming to the Swards of it, you must edge a little off from somewhat of the shore. When you come to the 2^d. buoy, then cometh the Mill to the N. wards of the *Kiickdown*, and at the third, the Mill and *Cane Neles* house come one in the other; which two buoys lie both in five fathom at low water. From the third to the innermost buoy it is North-east and by East, run close along to the Eastward of it, for to avoid the afore said little Tail of Sand, which thwart of it lieth off from the shore, and then forth within a Bow shot about by the Heads, and so along by the Strand of the Helder: For to sail up from the Helder towards *Wieringer flat*, you must go North-east, or somewhat more Easterly, according as the Wind and Tide shall be, or else in eight or nine fathom along by the *Texel*, until that the *Hoorn* come to the Northwards of *Zuydhaffel*, but take heed of *Wieringer* side, which is so steep there, that you may have twelve or thirteen fathom at one cast, and should be a ground before you should be able to heave the Lead again.

When that the *Hoorn* cometh then to the Northwards of *Zuid-haf-Zuydhaffel*, then keep them so standing, and sail up so to *Vogel-fel.* sand, when that *Eyerland* cometh even without the East point of *Texel*, then you have the length of the buoy upon *Burg-sand*, which lyeth on the south shore, upon a Tail of Sand, which Men may sail within a five or six fathom. From the buoy upon *Burg-sand*, it is East North-east to the Beacon upon *Vogel-sand*, but sail upon the foresaid Marks of the *Hoorn* and *Zuydhaffel*, so long, until that you have the Cape upon *Texel*,

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and the Mill of *Ooster-end*, one in the other, then keep them one in the other leaving the first Marks, and sail up so unto the buoy or Beacon upon the *Nesse*, and you shall run amidst the Channel in the Fair-way, which is ten, eleven, and twelve Fathom deep. If you bring the Mill a little to the Westwards of the Cape, then you shall be close by the south shore, which is so steep, that you may not come near it turning to windwards than in eight or nine fathom. Being come about the *Nesse*, then go on South and South and by West, towards the buoy upon the flat.

Tessel is a long plain Island, whereupon stands four Churches, the Westernmost hath a high sharp Steeple, and is called *West-end*, or *Sr. Johns*, but by the Pilots it is called *Westen* or *Wambus*. To the southwards of that standeth another sharp Steeple, called the *Hoorn*. The third is called the *Burg*, which standeth somewhat more to the Northwards than the other two before-mentioned. The fourth is called the *Keogh*, which is the Northernmost of them all, without a Steeple, and is covered with blew Slates.

Eyerland.

The *Eyerland* lyeth close to the Eastwards, or to the Northwards of the *Tessel*, and fast to it, when it floweth somewhat high it is divided off from the *Tessel* by the Sea, and made an Island, it sheweth it self off at Sea like a low plain little Island with little Hommocks, there standeth upon it no more than two little Houses.

Huyfdown is a short Point of Land with some white Sand-hills, whereof the greatest and highest is called *Kijkdown*, the next to the southwards of it, is called *Dirkooms* Sand-hill, further to the southwards they run flat off by little, and at length to nothing, in also some Sand-hills, betwixt the *Helder* and *Kijkdown* it is a most flat Strand, with some sand-hills like a Dike, upon which, about half way betwixt both, standeth the little or the outermost Cape, the great Cape standeth somewhat within the Land, about East from the *Kijkdown*.

Huyfdown

Huyfdown or the *Ma sdiap* and the *Maes*, lye South-west, somewhat southerly, and North North-east somewhat Northerly, about twenty four leagues asunder. From *Huyfdown*

to

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to *Petten* the Coast lyeth South and by West four leagues. *Petten* hath a little Church with a little Steeple, and thereabout you shall see two other little sharp Steeples in the Northland. A little to the Southwards of *Petten* lyeth *Camper-down*, the best Land to be known thereabouts, the North end is a high steep white Sand-hill, which goeth sloping down: The southermost part is gray and rough, being grown over with head or spiry grass, to the southwards of it lye many rough Hommocks or Sand-hills, where sometimes you shall see among them a white spot, so that it is very good to be known. From *Petten* to *Egmond* upon the Sea it is three leagues. *Egmond* upon the Sea is also very good to be known, for it hath a thick flat Steeple which standeth like a sail in the sand-hill, and a little to the southwards of it you may see *Egmond* within, which hath two high Steeples upon the Abbey close one to the other, whereof the one is sharp, and the other, to wit, the northermost, is flat, because the Spire is lately faln down. A little to the northwards of the Abbey standeth another Steeple of the Church upon the old Walls, but it is not so high as that upon the Abbey: So that upon all the Coast of *Holland* there is no place so good to be known as this. When you are thwart of *Wijck* upon the Sea, you may see *Beverwijck* a little to the Northwards of it which is a high thick and sharp Steeple: Besides that you may see also betwixt *Egmond* and *Wijck*, upon the Sea, *Castricum*, and more other sharp Steeples. From *Wijck* upon the Sea to *Sandfoort*, it is three Leagues. *Sandfoort* hath a sharp Steeple, with a high Fire-beacon, a little to the Southwards of it, in the black sand hill which sheweth it self also like a Steeple.

To the Northwards of *Sandfoort* lieth a high white sand-hill, *Sandfoort* along over which you may see *Haerlem*, a high Spire Cross Church, which hath a high sharp Steeple upon the midst of the Church, and also to the northwards of it a high small Steeple called *Baeckeneffer* Steeple, thwart of it hath the Coast of *Holland* a great Bay. From *Sandfoort* to *Northwijck*, upon the Sea, it is three leagues; that is a flat Steeple, whereby standeth a Fire-beacon. To the northwards of *Northwijck* upon the Sea you may see *Northwijck* within, a flat Steeple, whereupon standeth

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standeth a little Cap not high, and upon the midst of the Church standeth a little small Tower. From *Northwijck* to *Catwijck* upon the Sea, it is a great league, to the Southwards of it standeth a high Fire-beacon, to see to like a Steeple: You may also see thereabout within the Land, when you are not very far from the shore, *Catwijck* upon the *Rhijne*, and and *Rhijnsburgh*, and *Valkeburgh*, all sharp Steeples. From *Catwijck* to *Schevelingen* are three leagues, the Quire of *Scheveling* Church is somewhat higher than the Church of it self, in manner of *Hagues* Church, a little to the southwards of the Church standeth also a Fire-beacon. About an half League within the Land, you may see the Church of the *Hague*, which is very good to be known, the Quire is higher than the Body of the Church. The Land from *Scheveling* to the *Heyde*, it is two Leagues, and from thenceforth to *Gravesand*, or to the North side of the *Mase*, one League. The *Heyde* is a Village without a Steeple, but a little within the sand-hill standeth a flat Steeple called *Monster*. *Gravesand* is a high sharp Steeple, very good to be known, which standeth on the North side of the *Mase*. The *Brill* is a great flat Steeple on the South side of the *Mase*. All this Coast of *Holland*, from *Huysdown* to the *Mase*, is altogether clean, which Men may come so near to as they will, into four and five fathom.

Grave-
sand.

Of the Mase and Goerees-gate.

THE *Mase* hath two Channels or Deeps, the Norther Channel goeth in by the North shore, and the Souther by the South shore, or by the Land of the *Brill*. Betwixt these two Deeps lyeth a great Plate of Sand, called the *Honde-plate*, there remaineth at low water about six and seven foot, and at some places eight foot water.

Upon the North shore of the *Mase*, about South-west from *Gravesand*, are two Capes. Will you sail in the other Channel, bring the innermost of the two, that is the greatest Cap, a half handspikes length to the southwards of the outermost, and

then they shall be a little more southerly, than east from you ; keep them so standing, and sail so right in, and you shall not misse to fall right with the outermost buoy, which lyeth at low water in twenty foot. Or else, if you come from the northwards along by the Strand, and keep the sounding of the shore in twenty foot by low water, or somewhat more, according as it shall be flow'd, you fall also right with the outermost buoy : Or, if you keep nearer to the shore in eleven or twelve foot, then you shall fall with the second buoy. From the outermost buoy to the second, sail yet right in with the Capes, which lyeth in ten or eleven foot upon the shoaldest of the Channel, right thwart of the outermost Point of the Land on the North side, but nearer the *Hond-plate*, as the Point which lyeth off from the North Point, so that you must go about to the southwards of it, but along to the northwards it is broadest, but in all not wide. From the North Point runneth off a little tail, whereof you must take good heed, it is very steep, upon it the Sea breakes and ripples very much. With westerly Winds the Sea is all in a breach, all over that northern Channel, thwart of this foresaid second buoy, so that to see, it appeareth as if it were not a Channel; but fear not to run close along to the northwards of the foresaid second buoy, thwart of it you have no less by half flood than thirteen foot, or thereabouts. From the second buoy to the third, the Course is more northerly, you may see perfectly enough from one to the other. As you come to the third buoy, the innermost Cape is a little to the northwards of the outermost. The third buoy lyeth at the North end of the *Rasses*, also eleven foot as the second, which you must also go about to the northward of. Betwixt the second and the third in the Fair-way is also one depth. The North shore is steep about the second buoy, but towards the third buoy it is somewhat flatter, upon it self you can take heed.

The fourth buoy lyeth from the third South South-east upon the South end of *Rasses*. The *Rasses* is a great Sand-rib on the East side of the *Hond-plate*, which is very steep, and with low Ebbs cometh above water at some places.

Betwixt.

The Coast of Holland.

Betwixt the third and fourth buoy, you find it deep in the right Fair-way, fourteen, fifteen, and sixteen foot, which the Fishermen do call the *Panne*, on the North-east side it is there rising ground, which in turning to windward, you may borrow of it by your Lead, so should you as you will and please to have (according as your occasion) it self.

When the Steeples of *Monster* and *Gravesand* come one in the other, then you are past the *Rasses*. The fifth buoy lyeth in eleven or twelve foot water upon the East Point of the new Rib, and lyeth from the fourth buoy South-east and by South; all which buoys you must leave on the starboard side in sailing in. To the Eastwards of it the souther and norther Channels come together in one. From the fifth buoy to the sixth, which is the buoy against the *Polder*, it is most one Course as before, but may easily see from one to the other, that you must leave also on the starboard side, thwart of it in the Fair-way, it is sixteen and seventeen foot deep. Coming to the Eastwards of that buoy against the *Polder*, you shall see a House upon the Dyke betwixt *Swartewal*, and the Head of the *Brill*, called, House of *Lucht*, bring that over *Ambroeck*, which is somewhat a flat Steeple, a little to the southwards of *Swartewal*, and sail so right in with them, until you come before the *Brill*; if you desire to anchor there, and you shall so leave two buoys more on the larboard side. The first is the Eastermost buoy against the *Polder*, the second the buoy upon the *Crab*, which is a great broad tail which lieth off from the Island *Rosenburg* until past the *Brill*. But if you will not anchor before the *Brill*, but will sail further up, then run up right with the foresaid Marks of *Ambroeck* and the House of *Lucht*, until you come near the shore, and along by it, until you come to *Heenvliet*. From the East end of *Rosenburg* runneth off a Tail, which you might sail within when you sail upwards. If you bring not the Tower of the *Brill*, when you are past the Heads of *Swartewal*, without, or to, the northwards of these Heads, but keep it to the Southwards of them, then you cannot sail within it, but shall sail far enough along to the southwards of it. A little to the Eastwards of *Heenvliet* goeth in old *Maes*, the flood

The Brill.

*The old
Maes.*

flood falleth in there very strong, whereof you must be careful, that you be not carried upon the *Wheatland*, that is a great Plate of Sand lying in the midst of the Mouth of the old *Maes*, which falleth a great ways dry at low water, and lieth out with a long small point to the westwards into the *Maes*. For to avoid it, you must look out for a Wood of Trees, standing on the south shore, a little to the Eastwards of the old *Maes*, keep the Steeple of *Rotterdam* to the northwards of that Wood, and then you shall go clear of that *Wheatland*; but if you let that Steeple come to the southward of that foresaid Wood, you shall certainly come to touch upon the foresaid Tail. To the northwards of the *Wheatland* goeth in a Deep: which Men may sail up in the old *Maes* in *Dordrecht*, in it lye also two buoys: he that will run in there, let him run in by the foresaid Marks of the Steeple of *Rotterdam* and the Wood of Trees, so long, until that the Steeple of the *Brill*, come to a Tiled House, which standing, run then he shall not miss the buoy. Being past the old *Maes*, you must sail up, keeping the middle of the Channel past *Vlaerdingen* unto five Sluces; from thence you must chuse the South shore, and run close along by it until you be over a little bank, whereupon is at low water eleven or twelve foot water, nearer the South shore the deeper, lying thwart over the *Mase*, and you shall be past that, then go right towards the Head of *Scheidam*, there you shall have the deepest water.

If you will go to *Delfs-haven*, then (being past *Scheidam*) *Delfs-haven* keep the founding of the North shore, and run along by it until you come before the Haven, and anchor there. But if you will sail to *Rotterdam*, then run along by the North shore so long, until that *Overschie* and the house of *Spin* come one in the other, then edge over, or a little sooner, to the South shore, and run along by it, or bring the Steeple of *Vlaerdingen*, when you are past the Head of *Scheidam*, over the third house upon the *Scheidam* Head, and keep that so standing so long until it and the Head *Charless*, whereupon standeth a little Wood of Trees, come one in the other, and so you shall on the larboard side find a little shoald Plate, that lieth about

The Coast of Holland.

half ways betwixt *Scheidam* and *Delfs-haven*, and run along to the southwards of the shoald, that lieth before the Haven. Upon that foresaid Plate remaineth no more than seven foot water, and upon the shoald before the Haven, but two or three foot water, and are both very steep: When that foresaid Mill and the Head of *Charlois* come one in the other, then keep them so standing until that you come thwart of the new Head of *Rotterdam*, sail then towards the Town, and close along by it, in betwixt the Town and the Plate, there you may anchor.

For to find the Souther Channel (coming in of the Sea) before you can see the Capes, you must bring the Steeple of the *Brill* (which is a thick flat Steeple, without any Spire or sharp top upon it) East South-east from you, or somewhat more easterly or southerly, according as you get sight of the Capes, then bring them one in the other, and run so right in, you shall without fail run in sight of the outermost buoy, which lyeth in three fathom at low water.

From the outermost buoy to the second and third buoy, you must sail yet right in with the Cape, the second buoy lyeth in thirteen, and the third in eleven foot, being thwart of it, the Steeple of *Goeeree* cometh a little upon the foot-strand of the Land of the *Brills*. The fourth buoy, the same lieth from the third buoy, yet near upon the Course right in with the Cape, but a little more southerly.

Betwixt these buoys is the shoaldest of the *Mase* ten foot, it beginneth by the fourth buoy again to be deeper, that lieth in eleven foot. From without unto the fourth buoy the Channel is of a good breadth, so that you may turn in to windwards a good ways on both sides of the buoys, and borrow of the shores on both sides by your Lead, but right along a little to the southwards of the buoys, is the perfect deepest water. The fifth buoy lieth from the fourth East North-east, and North-east and by East, on the North side of the deep on the *Honde-platt*, in eleven foot, which you must leave on the larboard side, and run in about to the southwards of it. From the fourth to the fifth buoy, along to the southwards of the buoys, in the right Fair-way,

Fair-way, it is deep, thirteen, fifteen, sixteen, and seventeen foot, and by the fifth buoy five fathom. The sixth buoy lieth from the fifth East and by North, in eleven foot and an half, also on the North shore or *Honde-plate*, along to the southwards of it, the Channel is at the narrowest, and five and six fathom deep; the South shore is thereabouts very steep, close to it, it is six, and six fathom and an half deep. As soon as you come past the sixth buoy, then cometh *Mase* land Sluys and the Steeple of *Vlaerdingen* one in the other; keep them so one in the other, and run in so right with them, so long, until that you get the house of *Lucht* over *Ambroeck*, and then you shall run far enough along to the Northwards of the *Polder*, and by the side of the seventh buoy; along in the right deep, you shall find in this fair way four and four fathom and an half, go then towards the *Brill*, or upwards along where you desire to be, as is said here before in the Description of the Norther Channel.

All these foresaid depths, and those which follows in the *Goerees Gat*, are set there (as also in the Card) according to the lowest water of common Tide, and it floweth there six foot up and down.

The Goerees Gate.

Betwixt the Land of the *Brill* and *Goeree* go in also two Channels, the Northermost is called *Quacks-deep*, and is not for great Ships, but only for Smacks and small Ships; the other is the *Goerees-gate*. Betwixt these two Channels lieth a great Plate, *Hinder*, which at low water is no deeper than five, six and seven foot. To the northwards of it goeth in the *Quacks-deep*, and to the southwards of it the *Goerees-gate*.

For to find the *Quacks-deep*, coming in out of the West, you keep the Steeple of the *Brill* East from you, and run so in, until that a great Countrey-house, which you shall see stand alone a little within the Point of the *Quack*, come to the southermost sand hills of the Land of the *Brill*, which shall then stand

near about the South-east from you, keep that then so standing, and run so right in until that *Oost-vorm* come to the Westermofst sands hills, then run in alongst by the strand, somewhat more Southerly until that *Goeree* come to the Eastwards, or within the sand-hills, and then you shall be past the East point of the *Hinder*, which the Pilots call the *Buyen*, run then towards *Goeree*, or to the Eastwards to *Hellevoets-sluce*, where you desire to be.

*Goerees-
gate*

For to sail in at *Goerees-gate*, you must bring the steeple of *Goeree*, and the Cape upon the land of *Goeree*, one in the other, and then they shall stand East and by South, and South-east from you: or if you cannot see the Cape, then bring the Steeples East and by South, or East South-east from you, according as you shall have the Wind, sail in right with them until you come hard aboard the Strand, and within a balls cast in along by it East and by North, and East in so long until that the land do fall away more to the Southwards, thereabout runneth off from the shore a little Tail, which men might sail within, in going out, but not in coming in: there you must edge a little further off from the shore, being past that, luff up again towards the shore, or Haven of *Goeree*, and anchor there before it, or else if you will run up to *Hellevoet-sluce*, then bring the Mill which standeth to the Westwards of *Goeree*, a little to the Northward of the Steeple of *Goeree*, keep them so standing, and sail so up to *Hellevoet-sluce*, and you shall not come near the Plate which lieth over against, or to the Southwards of *Hellevoet-sluce*.

When you sail in at the *Goerees-gate* with a bare Southerly wind, and that you cannot bring the Cape and Steeple one in the other, you may bring the Steeple well East South-east, or a great Capstane bars length to the Northwards of the Cape, and then run over until you come against the Strand, and so you shall run over the tail of the *Hinder* in fourteen or fifteen foot at low water, but when the Cape and Steeple are one in the other, you shall not have less than nineteen or twenty foot. Being come over the tail of the *Hinder* in the right deep, it is six, seven, and eight fathom deep. A little within the Cape, or almost thwart of it, is the narrowest of the Channel, further in it

is wider, on the north side towards the *Hinder*, it is rising ground, but the South shore along by the Strand is very steep.



The Tides, Streams and Courses of these Places.

UPon *Wiererge* flat maketh full Sea a South-east or North-west Moon. Before *Tessel*, in the *Coop-vaerders* Road, an East South-east, and West North-west Moon.

Without the Grounds or Shoalds of the *Tessel* an East and West Moon maketh the highest water, and in the entring of the *Tessel* an East and by South, and West and by North Moon: but the Flood goeth a good while longer in, and likewise runneth the Ebb also longer out, then the lowest water. When the Moon is South or somewhat more Westerly, it beginneth apparently to flow without on the Strand, and likewise upon the Shoalds.

The fore-flood and after-ebb out of the *Tessel* fall both one with the other North North-east thwart over the Grounds and Channel, and right out at the *Spaniards* Channiel, until half flood, and to the contrary, the fore-ebb with the after-flood fall right in at the *Spaniards* Channel South South-east over the South Grounds, and thwart over the *Slenk*, and the other Channels, until half ebb. And a little while before half flood, the Flood beginneth to run right in at the Channels, and again a little before half ebb, the Ebb beginneth to set right out at the Channel. Therefore he that will sail into the Channels, must reckon his Tides very well, wherein consisteth very much, Without, before the Channel in the Sea, the Tide runneth about with the Sun, so that when as a Ship doth lie at an Anchor without the Channels, and hath neither good nor hurt of the ways of the Sea, it should have but a little still water.

In the North Sea the Tide falleth round, more than half Tide, upon the Broad Fourteens it turneth about with the Sun, or the Moon, and falleth but a quarter Tide right along the Sea. Nea-

rer.

The Coast of Holland.

rer the Coast of *Holland* and *Zealand* the Tide falleth (whether it be Flood or Ebb) somewhat sloping towards the Land, but in the midst of the Tide it falleth right along the Sea, and in the last of the Tide it setteth to Seawards, towards the Westwards or the Northwards.

Mars-deep. Betwixt the *Mars-deep* and the *Mase* in the fareway, the fore-flood cometh out of the North Sea, and turneth about with the Moon, falling towards the Land North-east, and North-east and by North.

The Fishermen of the *Mase* say, that when they are out of sight of the Land, they can perceive in calm weather by the turning about of the Tide, whether they be to Northwards or to the Southwards of the *Mase*. Somewhat to the Southwards of the *Mase* the after-flood turneth about against the Sun, but to the Northwards of the *Mase* it turneth about with the Sun, until the last quarter; and then it setteth towards the Shore, the Coast next unto it. They say also, that along the Coast of *Holland* men have no help of the Ebb in turning to windwards, towards the *Mase*, except they be without sight of the Land; because there go no Ebbs by the Land, when the wind is to the Southwards or to the Westwards.

Before the *Mase* a South-west and by West, and a Northeast and by East Moon maketh a high water.

Before the *Brill* a South-west and South-west and by South, and North-east and North-east and by North Moon.

Before the *Old Mase* a South-west and North-east Moon.

Before *Rotterdam* a South-west and by west, and North-east and by East Moon.

Before *Dordrecht* a West South-west Moon.

In the *Goeres-gate* and before *Goeree* a South-west and by South, and South South-west Moon.

Before *Hellvoet-sluse* a South-west and by South Moon.

Betwixt the *Mars-deep* and the *Mase* in the Fareway, the fore-flood cometh out of the North Sea, turneth about by little and little North-east and North-east and by North towards the Land.

In the Sea thwart of the places, (without sight of the Land)

it is a point or a point and a half later full Sea, the further from the Land the later.

Not very long after that the Flood beginneth to go without the *Mase*, it doth begin also to go into the *Mase*, but the after-flood falleth very strong in, and so likewise in the *Goerees-gate*. Close before the Channels by the Land, the Tide turneth about with the Sun, so that when the after-flood falleth in the Channels, it turneth to the South-wards, and becometh again a running Ebb: the after-ebb falleth again thwart off to Seawards out of the Channel.



Of the Depths and Grounds about these Places.

FIve or six leagues without the *Texel* lieth the Broad fourteens, lying from thence North-east with a small tail, which lieth about North from the *Texel*, and North-west from the *Fly*: to the Southwards it runneth with the East side against *Catwijk* or *Scheveling*, but the West side lieth off at least eleven or twelve leagues thwart off to Seawards from *Nortwijk* and *Catwijk*, it is a Bank most of fourteen fathom deep, in some places somewhat more or less. Betwixt it and the Land it is again 18. and 19, and to the Northwards 20 fathom deep. When you come over it about the *Texel* or the *Fly*, and come again in 16, or 17 fathom towards the Land, then you shall begin to see the Land.

There runneth off to the Southwards into the Sea from the Coast of *Holland* small banks, which are somewhat broad and shoald by the Land, and run off sharp and deep to the end, the first the Fishermen call the Small-eight, and beginneth a little to the Southwards of *Egmond* upon the Sea: the third and Southermost the Hard, a little to the Northwards of *Sandfoort*.

The high Steeples of *Holland* and *West-Friesland*, as *Egmond* within, *Wijk* upon the Sea, *Sandfoort*, and others, men may see before they can see the Sand-hills five leagues without the Land,

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in 14, or 15 fathom, that is, upon the South end of the Broad fourteens, but *Camperdown* and the Sand-hills whart of *Haerlem*, they may see before they can see some of the Steeples. The Steeples along the Coast are most of them flat, except *beverwijck*, *Schevelingen* and *Sandfoort*.

Before the *Mase* and *Goeree* men may see the Land in fourteen and fifteen fathom.

How these Lands do shew themselves at Sea.

Thus sheweth *Huysdown*, when it is from you East South-east.

Exclusively it self, being East and by North from you.

Camperdown.

Egmond upon the Sea.

Egmond within.

Beverwijck.

EB

The Coast of Holland appeareth thus, as is demonstrated by joining the two foregoing Figures A together betwixt *Huysdown* and *Wijck* upon the Sea, when you sail along by it, about two leagues off the Land.

Haerlem.

Hierlem.

Santoor.

Noordwijck.

Garwijck.

Schevelingen. Hague.

Monfter.

Thus sheweth the Coast of Holland betwixt Wijck upon the Sea and the Mase, when you sail along the same, about two leagues from the Land, as is demonstrated by joining these two figures B B together.

Without Z. Cape.

Within Z. Cape.

The Brill E. and by E.

East Voorn.



Recaigne.



When you are before the Mase, then the Land by North sheweth this: as is demonstrated by joining these two figures CC together.

Recaigne.

B B

Recaigne, *The Channel of Goeree.*



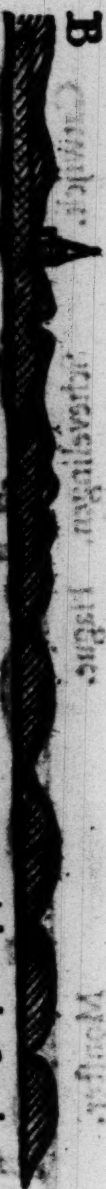
Goeree

Oudorp,

The Cape of Goeree.



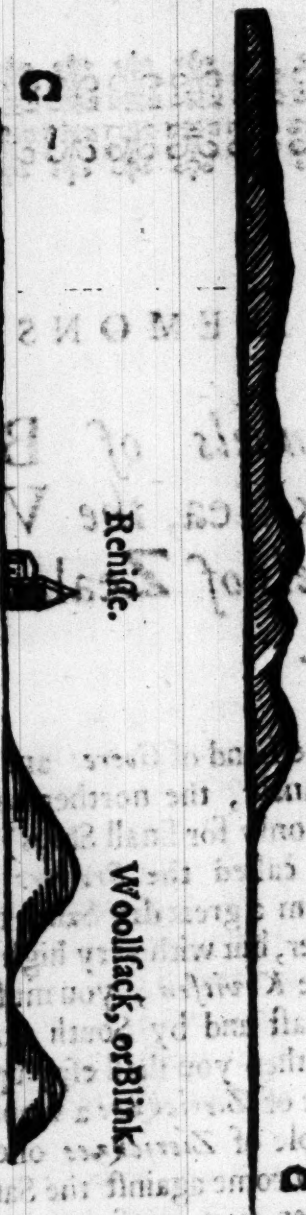
Being before the Male, and North-west and by West from the Brill, then
appeareth the Land from the South of the Male thus: as is
shewed by joining these two figures A A together.



When you are before the Channel of Goeree, about a league without the Land,
then the Land will shew it self on both sides thus: as is demonstrated
by joining these two foregoing figures B B together.

South-

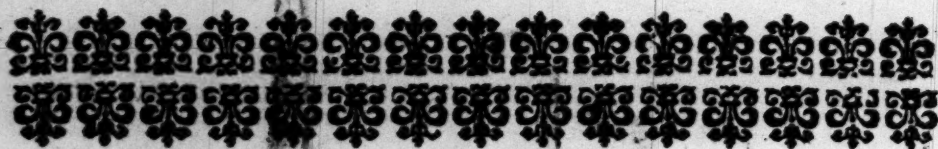
Thus sheweth the Land of Goeree, when the Cape and Tower come over
one another, and that you are a great league without the Land:
as is demonstrated by these two figures C C joined together.



Reinde.

Woollack, or Blink.

B b 1



X V D E M O N S T R A T I O N .

*The Channels of Brewers-Haven,
Sierick-Sea, the Vere, as also the
Channels of Zealand, in the Wie-
lingen.*

B Etwixt the Land of *Goeree* and *Schouwen*, there go in also two Channels, the northermost is called the *Kevitsen*, (which is only for small Ships) the southermost for great Ships, is called the *Brewers Haven* Channel. There lieth betwixt them a great dry Sand, called the *Springer*, which floweth not under, but with very high floods.

For to find the *Kevitsen*, you must bring the Steeple of *Zierickzee* South-east and by South, or a little more southerly from you, and then you shall espy upon the Land of *Schouwen*, about the Steeple of *Zierickzee* a wood of trees, bring that and the foresaid Steeple of *Zierickzee* one in the other, and run so right in until you come against the Sand, so shoald, or near, as you can, and then you run far enough along to the westward of the West head. When you come within the West head against the Sand, on the South side, then go in East along by the foresaid dry sand the *Springer*, at the end of the foresaid dry sand shooteth off also a point under water, the which you must sound

found for, being past that run then directly with *Brewers-Haven*, as is shewed in the Card. In this Channel it upon the shoaldest ten foot deep.

Before the Land of *Schouwen* thwart of the *Brewers-haven* *Brewers-Channel* lie 3 banks, the outermost, called the *Breebank*, lieth a *Laven*. kenning without the Land, upon which it is 7 fathom deep, and again within it 19 fathom deep, upon the second nearer the shore it is 5 fathom deep, and again within it 7 fathom deep, the third, called the *Ooster*, lies close by the Land, and runneth into the Eastwards, betwixt *Schouwen* and the Land of *Goeree*, upon it is no more than six foot water; when you will sail into the Channel of *Brewers-haven* you must go about to the Westwards of the same.

Upon the West end of *Schouwen* stand two Capes, bring them one in the other, and run so right in with them until the Steeple of the *Renisse* (which Steeple is somewhat sharp) come to the *Blank*, or *Woolfack*, that is a high white Sand-hill (which sheweth it self out in whiteness high above all the other Sand-hills) then leave the Capes, and run in by the marks of the *Blank* and *Renisse*, until that *Ondorp*, a little white Steeple upon the land of *Goeree*, come to the Steeple of *Goeree*, and so you shall go in betwixt the *Ooster* on the Larboord side, and the Hill on the Starboord side, and along a little to the southwards of the outermost buoy, until you come within the *Ooster*. When that *Ondorp* and *Goeree* are one in the other, then leave also the fore-said marks of *Renisse*, and run in right with *Goeree*, until that you come by the second buoy, or (if there lye no buoys) until that the *Bommence* come a little without the *Ooster* Tail, that is a point of *Schouwen*, lying out a little to the Westwards of *Brewers-haven*, sail so right in until you be past *Brewers-haven*.

This Channel of *Brewers-haven* is a broad and deep Chan-^{The Chan-}nel, very convenient for great Ships, he that must turn^{nel of} in or out to windwards may run along a good way on both ^{Brewers-}sides, as well of the outermost as of the second buoy; but to the ^{Haven.} southwards of them it is no deeper than the common Fare-way. The third buoy is a buoy with a Tail which is off from the *Ooster*, which

The Coast of Holland.

which you may not go to the Northwards of until you are very close along by it; all along by the Strand of *Schouwen* it is deep and steep, you may run close by it from the outermust buoy unto *Brewers-haven*, there is nothing that can hurt you, the shoaldest of this Channel is eighteen or nineteen foot at least, a league without the land in the coming in betwixt the *Ooster* and the hill. Further inwards it is four, five, six and seven, and at some places ten and eleven fathom, as it is shewed in the Card by the numbers of feet, and all at low water.

The Keel, the New-deep, the Velt, and the Room-pot.

MEN may run into *Zierickzee* through divers Channels, through the *Keel*, the *New-deep*, the *Velt* and the *Room-pot*. For to sail through the *Keel*, then run in as is before said of the Channel of *Brewers-haven*, first in by the marks of the *Blenk* and *Renisse*, so long until that *Ter Veer* come to the Westermost point of *Schouwen*, called the *Hoot*, keep them one in the other, and run so in until you come by the Strand, and then forth by it, and you shall find so in the *Keel* at the shoaldest eighteen and nineteen foot, and coming against the point of the *Hoot*, four or five fathom. Betwixt the *Hoot* and the *New-sand* (which falleth at the East at some places dry) run all along by the land of *Schouwen*, until you come thwart of the southermost Cape of *Schouwen*, edge then somewhat off from the shore towards the *Baniard*, for to avoid a Share which lieth off from *Schouwen*, which you might sail within when you come out of the Sea, there lieth a buoy upon the point, whereby it is good to be known: being past that, run all along by the shore, until you come to *Zierickzee*, somewhat within the buoy, upon the point of the Share there is lately laid another little buoy, for those that will sail that way out, for that they may not sail upon the East side of the foresaid Share.

For to sail in at the *New-deep*, you must look out for the two stone fire-beacons, standing a little to the southwards of the fore-

foresaid Capes of the Channel of *Brewers-haven*, bring the innermost a hand spikes length to the southwards of the outermost, and run in betwixt the Hill and the *New-sand* in sixteen, seventeen and eighteen foot, go in along the foresaid marks, until that you come by the Strand, and then come into the *Keel*. If you bring the fire-beacons one in the other, and sail so right in, you shall then run over the Tail of the Hill in eleven or twelve foot. The Hill is a Sand somewhat flat, which men may come near to the South side by their lead; but the *New-sand* is very steep, and the Sea breaketh very much upon it. When as that you come in by the Strand into the *Keel*; then run in along by the strand, as is before said in the description of the *Keel*.

For to sail in at the *Velt*, you must observe these marks here under described: almost upon the southermost end of *Schouwen* standeth a Tower alone in the field, with a Cape upon it, called *West-schouwen*, bring that Tower a Capstane bars length to the southwards of the foresaid southermost Cape of *West-schouwen*, and run so right in, and then you shall run through betwixt the *New-sand* and *Baniard*, and shall find upon the shoaldest, thwart off the outermost point of the *New-sand*, twelve and fourteen foot; being past that, there will be again fifteen, sixteen and eighteen foot, and by the strand twenty foot deep. When you come in by the strand, run all along by it until you come even to *Zierickzee*, as here before is said of the *Keel* and *New-deep*. When you run in at this Channel, you must take very good heed of the *Baniard*, which is very steep upon the North side, close to it there is three, four, and five fathom water, but thwart of the foresaid strand which lyeth off from *Schouwen* six and seven fathom deep. The *New-sand* is indifferent flat on the south side, that you may borrow of it by the lead.

The Veer-gate.

FOr to sail in the *Veer-gate* (coming from the Northwards) you must keep *West-capel* not to the Westwards or the South from you and then you cannot come too neer the *Baniard*: if you

you bring *West-capel* to the Westwards of the South from you, you should lightly sail upon the *Baniard*, run so right with *West-Capell* until that *Middleburgh* come over *East-Capell*, then you are to the end of the *Baniard*, and sail then right with *East-Capell* and *Middleburgh* until *Corrgeen* come through, or a great Capstane bars length to, the Southwards of *West-kerk*, they are two Towers standing in the sunken land, and shall be then about East south-east from you, keep these Towers so standing, and run in so right with them, and you shall run in sight of the first Buoy of the *Veer-gate*. In the *Veer-gate* lye three Buoys with two bottoms, of fashion like great Hogs-heads, which you must leave all on the starboard side. Before you come to the first Buoy, you shall sail by another buoy on the larboord side, lying upon the point of the *Polle*, which is a great point of the *Baniard*, that is a Pear buoy, of fashion like all other Sea buoys, which lye in the *Mase* or elsewhere. The foresaid first buoy in the *Veer-gate* lyeth in three fathom and a half. From the first to the second and third buoy, the course is South-east and by East, or somewhat more southerly, but you may easily see from one to the other. The second and third buoys lye two fathom, each upon a point of a Plate called the *Maid*. Over against the third buoy lyeth a shoald called the *Unrest*, which lieth with a long sharp point towards the third buoy, so that it is not there very broad betwixt them, therefore you must run close along to the Northwards of the buoy: betwixt the buoy and the foresaid point of the *Unrest*, it is not deeper than twelve or thirteen foot, but thwart of the first and second buoy it is broad and deep enough. Being past the third buoy, sail then right to *Ter-Veer*. Over against *Ter-Veer* lyeth a Plate, called the *Scotsman*, which you have only to avoid.

Roombot.

If you will go in at the *Roombot* to *Zierickzee*, and as you are betwixt the Pear buoy and the outermost buoy of *Veer-gate*, cometh *Donsburgh* to the *Hoot*: keep them one in the other, and you shall run along by two buoys more, which shall lie on the larboord side along by the *Polle*, and you shall see one buoy with a Tail, lying over against the third buoy of the *Polle*, betwixt

betwixt these two buoys you must run thorough, leaving with the Tail on the starboard side, and run about by it to the Eastwards. There lye also two buoys with Tails (besides the foresaid) upon the *Woolplate*, you may easily see from one to the other, these you must leave on the starboard side, and run along to the Northwards of them, about East south-east on, so long that the steeple of *Koukerk* come even without the point of *Schowe*, run then in right with that point, and about it, and so along by the shore unto *Zierickzee*.

When that you run towards the point of *Schowen*, then you shall sail through betwixt two buoys more, the one lying on the starboard side, upon the Eastermost point of the *Baniard*, or *Hoogplate*, and the other with a Tail on the starboard side, upon the point of another plate, which is called *Poolvoet*, lying betwixt the land of *Schowen* and *Oresand*. All the buoys with Tails you must leave, in sailing in, on the Starboard side, and those without Tails on the Larboard side.

The Fishermen run by day, most about to the Southwards of the *Poolvoetsplate*, and leave the foresaid buoy with the tail then on the larboardside; that plate is somewhat flat, that men may borrow of it by their Lead, but they must sound quick: but by night they run by *Schowen* close along by the shore, which is exceeding steep.

The Channel betwixt the Island *Walcheren* and *Flanders*, hath divers deeps and channels, where men may sail in and out through with great Ships, as the *Boskill*, the *Doorloy*, the *Splee* and *Wieling*. It is commonly called after one of the chiefest of the same, with the name of the *Wielings*. The greatest shoals, betwixt which these foresaid channels do run through, are: the *Rasses*, the *Raen*, the *English Polle*, and the *Innerbank*. The *Rasses* lye along the West side of *Walcheren*, the *Raen* to the Westwards of it.

The *English Polle* betwixt them and the Coast of *Flanders* lying off to the Westwards with a long small rib, unto thwart of *Ostend*. The *Innerbank* lyeth betwixt the East end of the *English Polle*, and *Cassand*, which is also called the *French Polle*, or the *Ript*.

The Botkill.

For to sail out at the *Botkill*, you must from *Flushing* run with a Cables length along by the shore through betwixt the Land and the *Geer* and the *Rasses*, the shore is very steep, so that men may come close by it with great ships without any danger, the *Rasses* are flat on the East, or the inner side towards the land. To the Eastward, or to the Southwards of *Souteland* in that Fare-way it is five and six fathom deep, but to the Northwards or to the Westwards it is deeper, and thwart of *West-capel* eight and nine fathom. When the Church of *West-capel* (which hath a flat steeple) cometh over the mill, thwart of that runneth a Channel through betwixt the North and East *Rasses* West south-west into the Sea, where remaineth at low water no less than two fathom water, keep *West-capel* and the foresaid mill one in the other, and run out so by them.

When *Buyes* Church cometh over the foresaid mill of *West-capel*, then keep them one in the other, and you shall run then right out at the *Botkill* through betwixt the North *Rasses* on the larboord side, and a sand called *Calloo* on the starboord side. In the *Botkill* is not less than four foot and a half depth, but upon both the *Rasses* remaineth at low water no more than two foot and a half, and upon *Calloo* three or four fathom.

The

Quernes.

To the Northwards of the Sand *Calloo* lyeth yet a plate, called the *Quernes*, lying Northwards almost until thwart of *Domburgh*; betwixt them both is a Channel of four or five fathom depth, called the *Easter-gate*. For to sail out there, or to find it coming in out of the Sea, you must bring *West-capel* to the Northermost head, which is a head very good to be known, and run out in or thereby. Betwixt the *Quernes* and the Land goeth out yet a Land-deep of three fathom and a half. For to find that coming in out of the Sea, you must run to the shore thwart of *Domburgh* (which is a sharp steeple) into three fathom or two fathom and a half, and keep the sounding of the shore so near as you please, and run in so along by the heads, until

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until you are within. When you come in at any of these Channels, and are come so far to the Eastwards, as betwixt *Buyens Church* and *Soutland*, and that you must turn to Windwards with an Easterly Wind, then you may sail through betwixt the *Easter Rasses*, and the plate to the Westwards of it, called the *Geer*, and so come out in the broad Channel into the *Door-loy* and *Splere*, and run so about to the Southwards of the *Geer*, until that you are come to *Flushing*.

About two leagues without the land of *Walcheren* lieth a long small bank lying South-west and North east, called the *Stone-bank*, upon the midst whereof there is no more than two fathom, and upon the North end of it three fathom water. He that will sail in or out at the *Botkill*, or the Channels to the Northwards of it, the *Eastergate*, or *Land-deep*, must sail about either to the Northwards or to the Southwards of that *Stone-bank*: when *Middleburgh* cometh over *Domburgh*, then are you thwart of this *Stone-bank*, but if you bring *Middleburgh* half way betwixt *Domburgh* and *East-capel*, and so sail to the land, then you run along to the Northwards of it. Or else if you bring *West-capel* East South-east from you, in a black valley of the Sand-hills, and sail so right in, then you run along to the Westwards or the Southwards of it.

Within the *Stone-bank* it is again eight or nine, and at some places ten fathom deep. Upon the foresaid marks and course: to wit, *West-capel* East South-east from you in the black valley, you may sail right in at the *Botkill*; when that *East-capel* cometh then somewhat through *Domburgh* or to the Eastwards of it, then you shall get deeper water, go then towards the shore, and so along by it as is before said. A little from the South-west end of the *Stone-bank* lyeth yet another, but it is not long, called the *Ooster-bank*, upon it remaineth at low water about four fathom.

The Doorloy.

FOR to sail from *Flushing* out at the *Doorloy*, with Ships that draw much water, you must set sail when that the water is flowed an hour or two, for to come with half flood, or against the highest water to the shoals, go from *Flushing* first along by the shore, and then West North-west, until that *West-capel* come within two ships length to the point of the sand-hills, bring that also not further out, and not nearer to the point of the sand-hills, for else you should sail upon the *Raen*. When *West-capel* standeth of, and *S. Anne* (a flat Steeple in *Flanders* to the Westwards of *Sluce*) standeth amongst the East sand-hills of *Casand*, then go North-west and by West out at the *Doorloy*. When *S. Anne* cometh then to the West-wards of that foresaid sand-hill, keep that under, or right to the East side of the foresaid sand, and go so out North-west and by West, and you shall go clear off the *Raen*, and *Rasses*. If you bring *West-capel* without the sand-hills before *S. Anne* come without the foresaid sand-hills of *Casand*, then you shall be too far to the Northwards, and too neer the *Rasses*. Or if you bring *S. Anne* without the sand-hills of *Casand*, before *West-capel* come to the end of the sand, then you shall be to the Southwards, and shall come against the *Raen*, but when you bring *West-capel* to the point of the sand-hill, and *S. Anne* without the sand-hills of *Casand* one as soon as the other, then you are amid the Channel of the *Doorloy* right in the fareway.

Doorloy.

For to find the *Doorloy* coming in out of the Sea, you must run to the *Raen* by the lead, until that *West-capel* come within a masts length neer to the *Sconce*, and sail so right in, or take the sounding of the *Raen*, and run along by it, until *S. Anne* come to the foresaid East sand-hill of *Casand*, then go in along South-east and by East, and you shall be soon over the shoalest, and find deeper water; but you must reckon well your Tides, for the flood falleth into the *Doorloy* first South (as also the after-ebb) afterwards South South-east, and at last to the

the Southwards. Therefore if you will go in at the *Doorlooy* with a fore-flood, you must go at least East South-east, or else, if you should go in upon your direct course, you should be lightly carried against the *Raen*. Coming then out of the Sea along by the *Raen*, until *S. Anne* be hidden amongst the sand-hills of *Casand*, then go on East South-east, until that *Westcapel* come within the point of the sand-hills, and run then boldly right on with *Flushing*.

In dark weather men may sound along by the *Raffis*, when that you keep the castle of Sluce to the Eastwards of the foresaid sand-hill upon *Casand*, then you cannot take hurt of the *Raen*, but when the Church of Sluce standeth to the West side of the foresaid sand-hills, then you are thwart of the shoalest of the *Raen*.

The Splete.

FOr to sail from *Flushing* out at the *Splete*, you must go on first West Northwest, until *Westcapel* come almost to the point of the sand-hills, but not without it, or that the Steeple of *Middleburgh* come to the inner sand-hill, then go West south-west, and then you run out at the *Splete*, which is more than a great half league broad, and at low water upon the shoalest four fathom deep. Betwixt *Sonteland* and *Dijschoeck* lieth a high sand-hill, which is at the East end somewhat steep, called the *Doorn-hill*, to the Eastwards of it lieth another sand-hill, which is somewhat long, not altogether so high as the *Doorn-hill*, with a clift or little dale in it, which doth divide them in two parts, the southermost is called the Inner sand-hill. When the Steeple of *Middleburgh* cometh over that Inner sand-hill, or in that foresaid clift, and keep that over it or in it, and then you run out at the *Splete*, and can take neither no hurt.

The *English Poll* is steep, but with easterly Winds men may ^{The Eng-} borrow of it by the lead. The *Raen* is flat on the inner side as ^{lish Poll.} well as on the out side, so that men may sound out along by it all the *Splete*, when you cannot have sight of the foresaid marks

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marks in dark weather, and it is so broad, that men have an half hours work for to sail thwart over it, but the *English Poll* is so narrow, that men may run over it with four or five cast off the lead. When *Aerdenburgh* cometh without the foresaid sand-hills of *Casand*, then you are past the dry *Raen*, but it lieth yet out to the Westwards with a great flat, so far to the Westwards that then *Bridges* cometh to the Eastwards of *Blankenburgh* in the Gallow herds.

From the end of the *English Poll* lieth a long rib, about a shot of a cast piece broad, called the *Ript*. When *Blankenburgh* standeth South-east and by East from you, it is upon the *Ript* at low water six fathom. A shot of a cast piece to the Northwards of that *Ript* it is deeper, and soft ground. Also when you come towards the South or South South-east a shot of a cast piece over the *Ript*, it will be presently a half fathom deeper, and soft ground, that is then the other Channel of the *Wielingen*.

Therefore when you come out of the Sea, and will sail in the *Splete*, edge to the Coast of *Flanders*, when you are (by your reckoning) past *Ostend*, and borrow to it by your lead, until that you get hard ground, and shoalder water, it is for certain the foresaid *Ript*: Having found the same in six, seven, or eight fathom, according as you shall be to the Eastwards or the Westwards, then edge off again to the Northwards into the Sea, until it begin to shoald and be hard ground; keep so the sounding of the *Ript* until you find deeper water and soft ground, run then East North-east, and edge now and then to the Southwards towards the Northwards the North side of the foresaid *Ript* until that *Bridges* cometh to *Liswegen* (being a flat and very thick Steeple) or that *Blankenburgh* stand South from you, then you come thwart of the point *Raen* into the *Sploten*. Then bring the Steeple of *Middelburgh* over the foresaid Inner sand-hill, betwixt *Santeland* and *Dishoeck*, and run in right with it East North-east until that the Castle of *Sluce* come to the Eastwards of the foresaid East sand-hills of *Casand*, sail then right on with *Flushing*, and so you shall go clear both off the *Raen* and the *Polls*. If it should happen in
dark

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dark or misty weather, when you cannot see *Middleburgh*, run in by lead along by the North side of the Ript East North-east until you find shoalading and hard ground of the bank, and so you shall run in betwixt the *Raen* and the Bank. When *Heyst* cometh to the fire-beakon, thwart of that is the Bank, or the *English Poll* at the shoaldest, to the Eastwards thereof the bank waxeth deeper; and being come past the shoaldest, if you edge towards the bank, you shall find deeper water, and may run over there at half flood with eighteen foot, but it is not good to do it, for not to sail upon the *French Poll*, but keep all along the sounding and hard ground of the Bank, and shape your course a little more Easterly for to avoid the *Raffles*, which lye thwart of *Souerland*, and are steep.

When you are come somewhat further in, go then East on towards *Flushing*, and you shall not come near any shoalds. Thwart through the *Raen* goeth a *Slenk*, where remaineth at low water not less than two fathom and a half water, for to find it coming in out of the Sea, you must bring *Aerdenburgh* a little without the point of the Sand-hills of *Casand*, or *Westcapel in Flanders* a little to the Eastwards of *Knock*, sail then right with it, until that you get deeper water, or that the Steeple of *Middleburgh* come over the inner Sand-hill, and run then in along with it. *Westcapel in Flanders* is a short flat little Steeple, with a little short blunt spire, or cap upon it, but *Knock* is a sharp Steeple not so high as *Heyst*.

The Wieling and Inner-Wieling.

Or to sail in at the *Wieling* (coming out of the Sea) you must run on the Coast of *Flanders*, when you are past *Ostend*, until you come in five fathom. Thwart of *Blankeburgh* there was wont a few years past to lie a bank, or shore off from the shore, which men might sail within, coming from the Westwards: now there is nothing, but a little flat, and *Dobbe-fand* is also altogether clean gone. Or else you must look out for *Liswogen* a flat Steeple, and the thickest thereabouts. When then

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then the Steeples of *Bridges* (being called the *Bruggelingen*) stand a Cables length to the Westwards of *Liswegen*, then you are yet to the Westwards of all the Sands, Polls and Banks; keep these Steeples so standing and run on the Coast, until you come over the foresaid *Rips*; and that you find again soft ground and more depth, until you come in five fathom, go then North-east, and North-east and by East with a flood, or North-east, and North-east and by North with an Ebb, reckon well your Tides, which runneth there most East South-east somewhat southerly, and West North-west somewhat northerly, and the Tide runneth but a little hour along the land, and keep the Steeple of *Wendynen* one or two ships length without the Sconce of *Blankenburgh*; so long as you can see them, and still in five fathom, when that *Heyst* cometh then to *Bridges*, and *West-capel* to *Knock*, then you are right in the fair way of the *Wielingen*, the nearer that you are to the Bank of the *English Poll* the deeper water you shall find, except that you have the shoalading of the bank of it self. *Bridges* must first come to *Heyst*, or else you should be so far Seawards, or too neer to the *English Poll*, with a fore-flood you may bring them both at once together, but not with a fore-ebb. If you get then shoalading that is of the *English Poll*, go from thence along the same course through, betwixt the *English Poll* and *French Poll*, or *Innerbank*, that is a hard Sand and steep, but the *English Poll* is thereabouts flat, which you may sound. When the Castle of *Sluce* cometh to *S. Lambert* (a high flat Steeple upon *Casand*, to the Northwards or to the Eastwards of *Sluce*) then you are past the *French Poll*, go then East on right with *Flushing*, or else observe these marks following: *Liswegen* must not come within *Heyst* before the Castle of *Sluce* come to the Easterly sand-hill of *Casand*, but remain without it, or else you should sail on against the *Innerbank*, when as that the Castle cometh to the sand-hill, go then boldly N.E. and by E. and E. N.E. for to avoid the *French Poll*, until that the Steeple of *Flushing* come to the Northwards of the *French Poll*, then you get deeper water: go then on East, and E. and by South right with *Flushing*. There remaineth in the *Wielingen*, as also in the *Inner-Wielingen* at lowest water, not less than 4 fathom and a half water.

Heyst.

Castle of
Sluce.

The

The *Inner-Wieling* lieth in through betwixt the *Inner-bank*, *Inner-Wieling*, or *French Poll*, and *Casand*. When you come from the westward *eking*. into the *Wieling*, and are come so far that *West-capel* come to *Knock*, and will go in at the *Inner-Wieling*, then you go from thence East and by South on, and you shall espy the buoy upon the point of the *Paerdemark*, that is a sand that shooteth off from the East point of *Sluce Haven*, and is very steep, leave that buoy on the Starboard side, and keep S. *Lamberts Steeple* even without the southerly Sand-hill of *Casand*, or *Sluce Haven*, and go on North-east, or somewhat more Northerly along by the shore, for to avoid the *Krakeland*, when as then the *Castle of Sluce* and S. *Lamberts Steeple* come one in the other, then go on East right with *Flushing*.

Flanders is a Land full of Sand hills and Hommocks, with *Flanders*. many Steeples along the Coast, lying from the Haven of *Sluce* unto *Calice* most West South-west and East North east. The first Steeple to the Westwards of *Sluce* is S. *Anne* a flat Steeple, and then *West-capel* a little short flat steeple, with a blunt cap upon it. *Heyst* to the westwards of them is a long sharp Steeple higher than *Knock*. Betwixt *Heyst* and *Blankenburgh* lieth *Liswegen* somewhat within the Land; that is a flat Steeple, and the thickest of all Steeples thereabouts, *Blankenburgh* is also a flat Steeple higher than *Liswegen*; but not thick. Within the Land from *Blankenburgh* standeth *Bridges*, two thick sharp Steeples upon one Church, to the Westwards of *Blankenburgh* a great half league lieth *Wendaynen* a sharp Steeple.



The Tides, Streams and Courses of these Places.

BEfore *Brewers-Haven* a South South-west, and North North-east Moon maketh high water.

In the Channel of *Brewers-Haven* a South and by W. Moon

At *Ter Veer* a South-east and North-east Moon.

In the *Veer-gate* a South and North Moon.

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It is not good to run in at *Veer-gate*, especially with a southerly or south-west wind, before that the flood be half spent, for the after-ebb and the fore-flood fall thwart over the *Baniard* hard in at the *Room-pot*, towards the land of *Schouwen*, but when the flood is half spent, then it falleth right in at the *Veer-gate*. When the Moon is South-east or North-west, then is the water already two third parts flown.

Like as is here before said of the *Mase* and the *Goerees-gate*, so also here before the Channels of *Brewers-haven* and *Ter Veer* the flood turneth about with the Sun, so that the after-flood falleth in the Channels, and turneth then afterwards about to the southwards, and becometh a running ebb, but the after-ebbs fall right out at the Channels, thwart into the Sea, and with the fore-flood again to the Northwards.

Before the *Wielings* a South and by West, and a South South-west Moon maketh the highest water.

At *Flushing* and *Rammekens* a South South-west Moon.

At *West-capel* on the land of *Waleheren*, a South and North Moon maketh high water. When the water is a half hour fallen, then the Tide beginneth to fall out there, and when it is flown a half hour, it beginneth to fall in: but before the *Botkill* it beginneth to go there first an hour before the lowest water, but it falleth long at Sea. In the *Splete* and over the shoals lying thereabouts, the Tide turneth about against the Sun, and at last falleth in at the Channels. A South and North Moon maketh there the highest water. The fore-flood falleth over the shoals there towards the Land. When the Moon is about East South-east, or that the water be about two hours flown, then it beginneth to turn towards the South, first South South-west, and then past the South towards the East, until that the Moon be South-South-east, and then the flood falleth to the Eastwards. When *Elankenburg* standeth about f. e. and by e. from you, from thence to the Eastwards, the Tide turneth about against the Sun, but from thence to the westwards you shall not find the Tides to turn about.

Against *Zealand* in the fareway a third part of the flood falleth towards the Land afterwards East and by North. Men may see *Zealand* from the *Poop* in sixteen fathom.



XVI. DEMONSTRATION.

*Wherein is shewed the South Sea, and
Vlye Stream.*

WHen you sail from *Amsterdam* to the fall of *Urck*, keep the middle of the channel, in sailing to *Tyoot* & from thence over *Pampus* with a Ship of a great draught, and keep *Marken* Church without the Land of *Udam*, until the Steeple of *Zuyderwou* are past *Kinningerbuyrd*, being the houses betwixt *Udam* and *Durgerdam*, go then towards the land East until *Amsterdam* New Church is about *Durgerdam*, keep it so until the Church of *Weesp* be come to the Castle of *Muyen*, and keep *Weesp* so until *Udam* come without the East end of *Marken*. In this fareway it is a foot deeper, as if you sail right through.

For to avoid the *Muyen* Sand, as *Monnikedam* is about the West end of *Udam*, and the Castle of *Muyen* betwixt *Weesp* and *Muyen* Church, then men are thwart of *Muyen* Sand. For to sail right over *Pampus*, keep the Steeple of *Diemen* over the point of *Tyoot*, so long as you can see *Tyoot*.

Being thwart of the East end of *Marken*, go on North-East *The Hout* to the fall of *Uick*, as you are a great mile off *Urck* you shall scribe. meet with a hard sand, called the *Houtribbe*, lying South-east and North-west thwart over the fareway, it is no more water, as upon the *Wiering* flat. When *Enchusen* is North-west and North west and by West from you, then men are upon the

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Houtribbe. Before men come against the sand, men can by night see the fire upon *Urck*.

As *Urck* is more Northerly as North-east from you, and men get shoalding, it is then the *Houtribbe*: coming from South, men are not about *Enchusen* sand, before *Urck* Church come without the houses, it is so East and by South; and East South-east from you, if men then go North-west and by West men run close along by the side of the sand. With a ship of draught bring the Church through the houses, until it stand East South-east from you, go then on North-west and by west. Likewise coming from the North, bring *Urck* not more Easterly as East South-east so you take no hurt of *Enchusen* sand.

*Marks of
Enchusen
Sand.*

From *Urck* to the Buoys upon the *Cripple* and *Hoffede* the Course is North-west and by west run with this Course unto the souther buoy upon *Wieringen* flat: in turning to windwards, bring *Medenblik* a little within the *Ven*, but as *Medenblik* is without it, then men are right in the fareway.

Betwixt *Urck* and the buoy up the *Hoffede* North-east somewhat Easterly of the Steeple of *Enchusen* lieth a Plate of a hard sand, towards the end of *Enchusen* sand, and is not deeper as the *Frees* flat, about by East of it is the deepest water, but about by West of it (by some called the *Kattegat*.) you shall be sooner about the high Horn, up *Enchusen* sand, and it is good for Ships drawing but little water.

The Cripple

The thwart marks of the buoys upon the *Cripple* and *Hoffede*: are *Grotebrock* and *Hem* two sharp Steeples right in the other, and *Warnis* a little Steeple in *Friesland* to the South side of *Stavorne Cliffe*, so men have the length of the buoys, lying each of them in three fathom, the one on the East, and the other on the West shore up the Tail of the *Cripple*. It is in the fareway twenty eight foot. Thwart of the *Creyl* in sailing out, or about the *Creyl*, in sailing in, a little within the *Creyl* on the North shore, is along the reach, towards the buoy up the *Hoffede* a hard sand, the South *Creyl*, up which is no more than two fathom by low water; betwixt them and the North shore is depth of three fathom and soft ground, and by South or West of it four fathom. As *Mirnes* a little flat Steeple in *Friesland* cometh

eth over a Country house by South by the *Cliffe*, so are you thwart of the plate.

The marks of the buoy up *Creyl* are the Steeple of *Twisch* over the Corn Mill by west of *Medenblik*, and the Steeple of *Mirnes*. From the buoy up *Creyl* to the buoy upon the *Frees* Plate is the Course North and by East. As the Steeple of *Twisch* cometh a little by North of *Medenblik* keep them so long as you can see it, and you shall not fail within any shoals *The Creil*

Betwixt the Buoy upon the *Creyl* and the *Frees* Plate on the *Monik*-West shore along the Reach is the *Monik* sand, which men can be foul of, if they run too far over by west. Being about the *Creyl*, go on North and by East with a ship drawing but little water over the Tail of *Broad* sand, right to the buoy up the Sand, called *Westworum*, but keep the fareway with other ships. For to find the deepest water up the flat, bring *Pandragen* a flat Steeple by west of *Worum*, and sail so right with it, it is a long mark of the buoy up the *Frees* Plate, and you run right with the buoy; as *Wains* and *Mirnes* come in the other, men have so the length of the buoy, lying on the west side of the Plate, run by west along of it, for the deepest water, coming from the North men can sail within the *Frees* Plate. *sand.*

As men are past the buoy up the Plate, go on North North-east until *Pandragen* come between the little Village and *Voorvolde*. If men have so the *Cliff* through *Stavne*, men have so the deepest water up the shoalest of flat.

Mirnes, *Mo'queren*, *Hemelum* and a little Village, standing in four parts are the old thwart marks of the buoy in the *Bight*. Betwixt the buoys upon the *Frees* Plate and in the *Bight* is the shoalest of the flat. As the buoy in the *Bight* is on your broad side, so go on North and by west somewhat westerly unto the buoy of *Westworum*, lying on the East shore in sixteen foot at low water, upon these marks, a little sharp Steeple called *Harich* cometh over a little Village by North of *Hinlopen*, called *erwisch*, the right deep thwart of it is three fathom. From thence to the buoy upon *Tgelhoeck* the Course is North, the marks thereof are a little sharp Steeple with the first long Village by North of *Westworum*, called *Geest*, as the little Steeple *The Flat.*

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Steeple is in the innermost swamp of the long Village, so have men the buoy, being a good thwart mark, the longest marks are the sharp Steeple of *Pingom* over the flat Steeple of *Cornwird* up the water side, and *Pandragen* to a little house by North of the Village with a swamp.

Feom *Ygelhoeck* to the *Middleground* the Course is North, the right deep in the *Middleground* is seven fathom, in the fare-way betwixt *Westworum* and *Ygelhoeck* it is four fathom, the East is flat, and the West shore is steep. The Buoy of *Middleground* lieth up these marks, the two sharp Steeples of *Arum* and *Pingom* in the other North-east from you, and the long marks are, as *Kimswart*, being the runner, cometh behind the Church of *Surick*, so are you right in the fareway. The Church of *Surick* standeth upon the water side, upon a point lying out North-east and by North from the buoy, then you are right in the *Middleground*, on which side *Wynaem* is nearest, that shore you are also nearest; the West shore is steep, the East shore indifferent flat, men can run over it in three fathom. From *Middleground* outwards to the *Flye* men can sail within no Tailles or sands on the West shore.

*Middle-
ground.*

Being past the buoy in the *Middleground*, so go on North North-west unto the buoy upon *Swanebalgh*, which lieth in three fathom on the East shore, and the thwart marks thereof are *Bolswart* over a little short House by South of *Cornward*. As men run over betwixt the buoys of the *Middleground*, and *Swanebalgh* on the East shore more Easterly as in three fathom, men might in sailing out, sail behind the shoals of *Swanebalgh*, on the West shore it is good ground for to ankore in.

*Schuet-
sand.*

From the Buoy upon *Swanebalgh* to the Buoy upon *Schuytesand*, the Course is North-west the thwart marks thereof are *Wynaem* over the highest part of *Harlingen*, and the long marks, *Bolswart* by North of the *Sluys*, lying by North of *Woens*, this buoy lieth in six fathom on the East shore upon a Tail, which men might sail within, as men sail out, the right deep thwart of it is seven fathom, the West shore is indifferent flat, the East shore is steep, but a little without the buoy it is flat all along to *Keeshoeck*, and men can sound it all along unto the *Sloot*. In sailing

sailing up, men might sail within the west shore over against *Schuytesand*, or in *Deadbalgh*, behind a Tail of Sand called the point of the *Waert*, but keeping in four fathom from that shore men take no hurt. In sailing up with a fore-flood, keep the East shore, else men are lightly carried into the foresaid Balge behind *Waert* before you should be aware of it. Upon the point of the *Waert* standeth a Drift beacon, and two to the Northwards or Westwards of it, which are called the beacons of *Clacs-oomen*, by South of it is a beacon upon *Meynsen Plate*. The marks for to sail along this long reach are, *Mackum* with a mill upon the water side, and a Village with a little flat Steeple by South from *Mackum*, as *Pandragen* is betwixt *Mackum* and the Village, then you go clear off the Tail or *Deadbalgh*: if *Pandragen* come nearest to *Idsegahuysen*, then you are too near the Tail, or if *Pandragen* cometh nearest to *Mackum*, then are men too near the East shore.

From *Schuytesand* to the buoy up *Keeshoeck* is it West *Keeshoeck* North-west. In that long reach go little more than half tides along the deep, the after-flood and fore-ebb fall thwart over there on West, and the after-ebb and fore-flood contrary on East. The marks of the buoy upon *Keeshoeck* are *Franiker* Steeple betwixt the Mill and the Town of *Harlingen*.

Betwixt *Keeshoeck* and *Schuytesand* lies a narrow plate along the reach, most in the fareway nearest the west shore, whereupon is four fathom, running to windwards you are over it with two casts of the lead.

Westwards from the buoy upon *Keeshoeck* is the old *Flye*, *The old Flye*, it lieth in first South South-west, and forth to the buoy upon the *Nesse* in the *Tessal* Stream. The after-flood with the fore-ebb fall very strong in it. In sailing upwards men can sail within it in four fathom. The marks thereof are the Steeple of *Franiker* to the southwards of the Steeple of *Harlingen*, from thence outwards off unto *Schiering-shals* the West shore is steep, in eight fathom men are by it, the fareway betwixt the buoys is ten fathom.

From *Keeshoeck* to *Wolfschoeck* is the Course first North. *Wolfschoeck* west, and North west and by North to the buoy betwixt them both,

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both, by the Pilots called the Buoy upon the *Elbow*, and from thence to the Buoy upon *Woolfshoeck* North, or somewhat Easterly, which lyeth in four fathom on the East shore.

From the Buoy upon *Woolfshoeck* to the buoy of *Schiering-shals*, is the Course North North-west, and North-west and by North. To the Northwards or Eastwards of it goeth up a broad Bight South-east far into the grounds, so deep as the fare-way called the *Inschot*, coming in men sail within seven fathom, the fore-flood falleth from *Schiering-shals* into it, and the fore-ebb very strong out of it upon the Tail of *Schiering-shals*, whereby many ships are miscarried.

Schiering-shals is a Tail Sand shooting off from the West shore, upon it lieth a white buoy in four fathom, coming in from without, sail within it in six fathom, the right deep betwixt *Woolfshoeck* and *Schiering-shals* is nine fathom.

Longsand. From *Schiering-shals* to *Longsand* the Course is North-west and North-west and by North, betwixt them both on the West shore it is the best road of the *Flye* stream, there is also a little tide. The right deep is eight, nine and ten fathom. *Longsand* men may sail within it on the East shore, in sailing up, but if men keep themselves in seven or eight fathom they shall not come too near neither of *Longsand* nor *Schiering-shals*. From *Longsand* to the *Sloot* the Course is forth North North-west the right deep is ten fathom, you run along by the beacon upon *Crake* and until you come in the *Sloot*.

The Island *Flyeland* is three Leages long, and a Land very easie to be known: upon the East end lye high white sand-hills, and to the westwards it is a Land full of short low Homocks and Knobs. Upon the West end there is a Church with a mill to the Eastwards of it. From thence shooteth off a Riff a good way into the Sea. To the westwards of this Riff betwixt *Flyeland* and *Eyerland* goeth in a deep, called the *Wester-gate*, or *Westfiel-deep*, it is not for great ships, but only for Fisher boats; there is eight or ten foot water. Upon the East end there is a Mill and a Cape, which are the marks for to avoid the ground lying before the *Flye*.

*Th. Schell-
ling.*

To the Eastwards of *Flyland* lieth the *Schellingh*, being about
theer

three leagues long, upon it are four Churches, the westermost is a high flat Steeple, called *Brandaris*. About the middle of the Island are two Steeples, the westermost is the flat called *Zeerip*, the easternmost is sharp, called *Midlands*. To the eastwards stands yet a high sharp Steeple called the *Hoorn*, and a Chappel called *St. Johns*. Upon the East end lie high white sand-hills, and upon the West end lyeth but one, called the *Lit*. Betwixt *Midland* and the *Lit* it is low Knubby land. Upon the West end standeth a Cape with a fire-beacon, which is fired by night.

For to sail in *Stordemelk*, being the Land-deep of *Flyland*, so bring the Cape upon the East end of *Flyland* and the Mill in each other, it is then from you South-east and by East, sail right in with them, and so you fall right with the outermost buoy, lying in five fathom upon the outermost point of the long bank, which bank is on the North side indifferent flat, so that coming from the North men may run by it up the lead in five fathom, and so also find the outermost buoy. Men may also for need run along by the East of the outermost buoy over the end of the long bank within three fathom of the shore, but not to the Eastwards of the second buoy; but a good way to the Eastwards of it, lying even to the Southwards of the point of another narrow tail of sand, upon which thwart of the buoy is but eleven foot water, betwixt that tail and the long bank runneth a Creek, to the Eastwards into the grounds, of five fathom depth.

It happeneth sometimes that the ships that come over the end of the long bank, and finding again deeper water, think they are in the right deep of *Stordemelk*, and luff upwards into it, but they run in the foresaid shore, or Creek, betwixt the two Tails of Sand, and is not without a great danger with a westerly wind, where they must go backwards again out. Coming from the westwards along by the Island *Flyland* in four or five fathom, you shall not also fail to run in sight of the foresaid outermost buoy. He which falleth about the Deep of *Stordemelk* by night, let him bring the fire-beacon South-east and by East from him, and run so right into it, until that he come by the

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shore, and he shall run along to to the westwards off the outermost buoy. In *Startemulck* lie seven black buoys and one white, leave the black buoys on the Larboard and the white on the starboard side. The second buoy called the *Droge dry*, lieth in eleven foot up the shoaldest of the Channel, by South of it is also no more than eleven foot; but a little within it is sixteen foot. The third is called the innermost *Droge dry*, lying in sixteen foot, the right deep betwixt them both is three fathom. The fourth called *Kyckboeck*, betwixt this and the the third it is in the fareway five fathom: over against the fourth is the white buoy at the Strand: thwart of it runneth off a little Tail from the shore, which men might in sailing out sail within it. Unto this white buoy, or unto the fourth buoy from without it lieth in East North-east, from the fourth to the fifth East, and more Southerly. The fifth buoy is called the outermost point buoy, and the seventh or last the innermost. Berwixt the outermost and the middlemost point buoy, nearest to the outermost, runneth a Tail of Sand from the shore, where men can sail within, in coming in, growing out sometimes as far as the buoy, and then the Deep breaketh through again by the Wall and scoures the Taile altogether to the North shore. From the innermost buoy men must run along by the Strand of *Eylant*, or on South the buoy upon the Plate.

Easter Booms Gate.

FOR to sail in at *Booms-gate* coming out of the Sea, or from West, bring the Cape up the *Schelling* and the Steeple of *Brandaris* one in the other, standing so South South-east and South-east and by South, run right in with them. you find so the outermost buoy without the chanel in the Sea is eleven fathom, a little without, and to the East of the outermost point of the steep grounds, being without upon the Northside so steep, that men are in twelve fathom very close to them, whereupon it is no more than five foot. Close by East of the Cape is a fire bea-

con

con; and upon it is fire every night, as upon *Brandaris*. If *Brandaris*
by night men bring the fires one in the other, or the beacon-fire
West and by North, and West North-west off the fire of *Brand-*
aris, sail so right with them until you come against the south
shore, then you shall run close along by the outermost buoy,
as the fire upon *Fly-land* is off South South-west, or a little
westerly, so are you thwart of the outermost buoy.

The foreflood falleth East North-east thwart over this Chan-
nel most until half flood before it goeth right in, and the fore-
ebb also thwart over the Channel most until half ebb before it
set right out, therefore it is best with a North-east or Easterly
Wind and fore ebb to seek to the shore somewhat to the East-
ward of the Cape and Steeple, run by it in five fathom, being
clean and flat until within the Cape and Steeple.

The second buoy lyeth in four fathom, within the outermost
point of the steep grounds, lying from the first point about
South and by West. Betwixt these two first buoys it is twenty
foot deep up the shoaldest of the Channel, thwart of the fore-
said point of the steep grounds, being at the end so steep, that
it is by them eighteen foot, the East side is flat rising ground,
and shoaldeth from eighteen to fourteen and twelve foot. By
East of the second buoy is the fair-way three fathom, and by
West of it is five fathom, but not far, therefore you may not
run far along by the West of it. With a fore ebb men should
be soon on against the steep grounds, being on the inner side
also steep. Men can sail by the lead about the East shore, but
a Storm breaketh the Sea very much up it until the second buoy.
The second and third lye South-west and by S. one from another,
the fourth and fifth lye South-west and by West from the third,
the third lies in five fathom on the East shore, where men can
sail about Eastwards, the shore is there plain and even, and the
fair-way on the West side. The fifth is the buoy upon *Fayhe-ak*,
which lieth also on the East shore in five fathom, but nearer than
the third, men can sail along by East of it, the deep by West is
nine fathom.

Until past the buoy men can sail in from without upon the
lead by the East shore, and also by night, but inwards it is wide

and broad. From *Feyboeck* you sail unto the *Robbegat*, on the North side of them up the point of the Plate is a Beacon in the midst of the *Robbegat*, next to the Plate is a small shoald, upon it is a buoy, in coming in betwixt this buoy and the beacon is the deepest water, but men must go in along by the beacon for not to be abused with the stream, falling thwart over the Plate, it is betwixt the small shoald and the Rozyne Plate wider, and the Course of the *Robbegat* is South-west and South-west and by West. Being past the *Robbegat* so goeth the strand of *Flyeland* along by it.

Wester Booms Gate.

For to sail in the *Wester Booms-gate* coming in from the West, so bring the Head and Tower of *Brandaris* one in the other, it will be East and by South from you, running so in, you shall find the outermost buoy, there is six fathom, keep the Cape or Head so standing until you come to the second, then bring the Tower a great handspike to the South of the Cape, and sail in with it, so doing you shall sail between a black and a white buoy, where it is seventeen foot by low water, from thence you shall come to six fathom, and so come in right at *Booms Channel*.

The Letting For to sail into *Jetting* coming through the *Robbegat*, about the Rozyne plate, men must go to the buoy upon Longsand, and so betwixt the white and black buoys, leaving the black buoys in sailing in on the larboard, and the white on the starboard side, until men come against the beacons upon the *Nakens*, you can then commonly see from the one buoy to the other, sail then along by the beacons upon the *Nakens* East South-east, on until *Brandaris* come close by *Grind*, but not to it, keep it so standing and run on South, you sail so right upon the Tail of *Hendrik Tjaders* Plate, where you might sail within on the East side, leaving the same on the larboard side you run along to the westwards of it South South-east unto the last buoy, lying upon the south point of *Hendrik Tjaders* Plate. Over against

the beacons up the *Naken Iye* on the South side two white buoys, the Eastermost upon a Tail of Sand, which men might sail within in sailing off, to the Southwards of it, betwixt the two last black buoys, by the West side is the Road, where the Ships do anchor for to light, being bound to *Harlingt*.

Note. All the depths before rehearsed, as well of *Storckenel* as of the *Booms Channels*, are said of the lowest water, at half flood it is three foot deeper, it floweth upon these places with a common Tide six foot. The Numbers of the depths down in the *Carde* of the *Flye*, and *Amelands Gate* are to be understood of feet. As for Example; By the first buoy of the *Easter Booms Gate* stand forty two, that are forty two foot, or seven fathom, six foot being reckoned for a fathom.



Of the Depths and Grounds about these Places.

THE Islands *Flyeland* and the *Schelling* men may see in sixteen fathom. Thwart of the *Schelling* the Ground is white Sand.

The steep Grounds or *Petersand* and *Bornasse* are very steep on the off side, close by them it is twelve fathom deep.



The Tides and Streams of these Places.

AT *Amsterdam* a North-east and South-west Moon maketh high water.

At *Horne*, *Enchusen* and *Urk* a North and South Moon.

Betwixt the *Cripple-sand* and the *Croyl* a N. and by W. and S. and be E. Moon. Upon the *Freeze* and *Wieringer* flat a N.W. and S.E. Moon.

- In

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In the *Flye* a S. E. and N. W. Moon maketh high water. Before the *Flye* the Flood falleth to the Eastwards thwart over the grounds almost until half flood, before it setteth into *Boonskens Gate*. Likewise the Ebb falleth to the Westwards thwart over the Grounds, almost until half ebb, before it setteth right out at the Channel. The after flood turneth about with the fore ebb, and falleth along *Flyeland* out at *Stortemelk*.

Flyeland sheweth thus when you are sailing off from it two leagues.

Thus sheweth the Schelling, as you sail along by it, two leagues off the Land.

How these Lands do shew themselves at Sea.





XVII. DEMONSTRATION.

*The Ameland Gate, Scholbalgh,
the Easter and Wester Eemfes,
unto the Island Baltrum.*

TWO Leagues to the Eastward of the *Schelling* lyeth *Ameland*, lying East North east and West South-
West four great Leagues. Upon the West end of *A-
meland* standeth a Cape and a thick great flat Steeple,
called *Holme*; the roof of the Church is broken off; but the
after front with the roof is above the side walls; by East of
them is a Mill with a house by West of it. About the place
where *Midlands* Church was wont to stand, lye four white
sand-hills, being low, flat, and long, towards the East end it is
knobby Land with white amongst it. From the West end of
Ameland runneth off a Riff three leagues in Sea, called *Born-riff*,
being on the outer side very steep, come no nearer than in
twelve fathom, coming from East men cannot sail within it,
but sailing by it in seven fathom, you run nor a bowles cast
without it.

For to sail in *Ameland* Gate out of the Sea, bring the Cape *Ameland*.
upon the East end of the *Schelling* over the Steeple of the *Holme*, gate.
and sail in with them, until the Cape upon *Ameland*, and the
Holme

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Holme Steeple are in another, leave so the first marks, and sail in upon the second, you find the outermost buoy, lying within the outermost point of *Born-riff*. From Westwards run by the Strand of *Schelling* in five fathom, you sail so upon the outermost buoy, the Cape and Steeple up *Ameland* come then in each other. Coming by the *Schelling* in four fathom, you sail not in the *Koggedee* grounds, thwart of it is the first buoy on the South side of *Born-riff*, run by South of it keeping the Steeple and Cape in one another, until you are past the second buoy.

Being past the second buoy, bring the Steeple by North of the Cape, go then E. North-east to the third buoy up *Gerritshonden*, on it lye two white buoys, the first over the four black buoys, leave all the black on larboord, and the white on the starboord side, you may then run up the lead by North of the Plate, but be careful of a fore-ebb, falling strong over it N. North-west into Sea over *Born-riff*. Betwixt the second and the third buoy in the fareway it is nine, by the third and the Plate seven fathom.

Being past the four buoys both sides are steep, and the fareway nine fathom, go so in South South-east until the Steeple of *Holme* cometh over the South point of *Ameland*, and so you come in the Bight, anchor there on the South side which is flat in six fathom.

For to sail further in the *Horsen*, go from the Bight East North-east, by the South side in five fathom until *Heynooms* chamber, being a red tyled house, come a little by North of *Holme*, anchor there in six fathom, men lye there, sheltered from all winds, it being there twelve fathom deep, and the North side is very steep. The foresaid depth (like as also of the *Flye*) are all said to be the Tides of low water.

Schiermonk-oog.

Schiermonk-oog is from the Easterly end of *Ameland* East somewhat Northerly three leagues, being a low plain Island, and about two leagues long, at the West end are two Capes

Capes and a white sandhill, otherwise it is all with low blackish sandhills, and mingled with white, the East end is a long flat strand, with little low rough sandhills. As men bring the two Capes one in the other, and run so in, men find so the outermost buoy lying without at Sea in seven fathom, leave the buoys in the Channel on the starboard side, and run along the Eastwards of them, being within the Channel men find also beacons on the West shore, follow them all along, until you are come to *Ostma-horn*, where men can anchor. The Depths of that Channel do shift oftentimes, so that there is no certainty to be described of it.

Four leagues to the Eastwards of *Schiermonk-oog* lieth the *Borkum* Island *Rottum*, and betwixt them the little Island *Bosch*. Betwixt the *Bosch* and *Schiermonk-oog* was a Channel called the *Lavers*, but is now most cast.

To the Eastwards of the *Bosch* goeth in the *Schille*, which is sometimes deep and sometimes shoald.

The Island *Rottum* is a little Island two leagues long, and easie to be known, the West end is high and steep, the rest is low land, upon the East end stand two Capes, the greatest is upon the flat strand, the smallest on the South side of the Sandhill, there standeth also two houses upon it.

Borckum is also an Island easy to be known, two great leagues long, it riseth in three parts coming out of Sea, from Westwards in four parts, for which high floods the water runneth through in three parts. The Worthy Counsellor of *Emdden* hath caused to be set upon the West end a high thick Steeple, you can see it far off in Sea, on the West side thereof is a low Church.

From the West end of *Borckum* shooteth off a Riff a great way in Sea, called *Borckum* Riff. To the Southwards of it betwixt *Borckum* and *Rottum* goeth in the *Wester-Eems*, being the best Channel of this Coast.

The VVester Eems.

FOr to sail into the *Wester Eems*, you must bring the Capes upon *Rottum* one in the other, which shall stand about East South-east from you, sail in out of the Sea right with them, and you find the outermost buoy in five fathom.

Or else if you come from Westwards, running along the shore in seven fathom, you run so in sight of the aforesaid buoy, then the Steeple of *Borkum* shall stand East and more Southerly, and the West end of *Rottum* South-east and by South from you. Towards the Land from the second buoy is a Plate, lying called *Gelsacks* Plate, lying almost along the reach unto the fourth buoy, whereupon is 15 foot at low water.

From the first buoy to the second, third and fourth the Course is along East, the second buoy lieth in five, and the third in four fathom and a half, that is upon the shoaldest of the *Wester Eems*. The fourth buoy lieth also in four fathom and a half upon the point of the Plate. All these buoys men leave on the starboard side in sailing in.

The Riff of *Borkum* is on the off-side and upon the end flat, as the Capes upon *Rottum* stand South-east from you, so you can sail along over the Riff right unto the fourth buoy, upon the Tail of the Riff is at low water sixteen foot, for it is flat and broad, on the inner side it is very steep, there is shooting off also from the inner side a Tail of Sand, which men might sail at unawares within in sailing up.

From the fourth buoy in the Bight of *Rottum* the Course is East South-east, from this buoy to the buoy upon *Huybers* Plate the Course is East and by South, and from this buoy unto *Steven Johnsons* buoy the Course is South-east, lying betwixt *Bag-beacon*, and the *Ruyt-beacon* in seven fathom and a half. Betwixt these two buoys is the *Eems* twelve fathom deep. Coming past the buoy upon *Huybers* Plate, you must edge somewhat off from *Borckum*, for to avoid the *Mieuwe* Tail, shooting off from the South end of *Borckum*, which you might sail upon Westwards.

in five fathom, as you are bound inwards.

Westwards from *Steven Johnsons* buoy is the *Wad-beacon*, right to the Southwards of it goeth in the *Wad*. On the other side over against the foresaid buoy lyeth the *Ransel*, being a Tail and shooting off from the North shore, which men might sail within in five fathom, in sailing upwards. The marks of this reach, and for to avoid the *Ransel* are these: Upon the South end of *Borckum* lie two little Sand-hills, called the *Wolden*, keep the Steeple of *Borckum* to the West side of these Sand-hills, or by West of them, and so you go clear off the *Ransel*, it is in that reach eight fathom deep.

From *Steven Johnsons* buoy to *Doeck* buoy the Course is East *Steven Johnsons buoy.* South-east, betwixt these two buoys standeth a Beacon on the South shore, called the *Ruy*: beacon, by this buoy the *Eems* is in the fair way about seven fathom deep, this buoy lieth on the South shore in five fathom, upon a Tail, which men might unawares sail within in sailing up, the Flood falleth very strong behind this buoy in *Doeck* gate. The marks of *Doeck* buoy are, as the Cloister of the Dam, being a flat Church, cometh by West *Oidcloister*, so as one can even see through betwixt them, sou have the length of this buoy, and then so stand these marks South from you. From *Doeck* buoy to the last buoy the Course is along East South-east, being past, men shall espy the Beacons on the West shore, sail along about by them. The marks of *Eemshorn*, are a mill in *Eemderland* about East and by North from you, and a high house to the Northwards of the Church, as the Mill standeth betwixt that house and the Church, then you have the length of *Eemshorn*. About *Eemshorn* stand two or four beacons, whic^t lead you even unto *Groeningerland*. Being past *Doeck* buoy, then you can sound by the West shore until you come to *Otterdams* in six fathom, come no near to it. for it is very steep; the East shore in sailing in men sail within it in six fathom, behind a Plate called the *Hond*, being a hard sand, further in is also another Plate called the *Pape*, and are fast to each other, the West shore is clay ground to *Otterdams*; keep all the West shore.

For to avoid *Reyder* sand, being a Plate in the midst of the *Reyders sand.*
Eems,

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Eems, by low water is hereupon ten foot. Look out for *Ouderdam* a flat Church without a Steeple on the dyke, coming thwart of it, edge over to *Emderland*, to wit, to the *Knock*, being a flat Steeple in the water standing upon the point, coming by the *Knock*, run then within two Cables length by the North shore unto *Loegerhorn*, so sail you not too near the Plate. Betwixt the *Knock* and *Loegerhorn* is a flat Steeple called *Ger, ridswaerd*, as men see through the Steeple, so are you by the foresaid Plate.

The Easter Eems.

For to sail in the *Easter Eems*, bring the Church of *Borckum* South of you, if it be then clear sight, you are able to see through the Steeple, sail so right in with it, you find the outermost buoy in four fathom by low water.

From this buoy to the second it is East and by South. The end of *Juyt* Riff betwixt these two buoys is on the inner side so exceeding steep, that men cannot sound it, further in from the second buoy it is flatter, here men may sound, the buoy lieth in three fathom by low water upon a point of a narrow long bank, shooting off from the East end of *Borckum* where men can sail within, called *Brewers Plate*, which Tail is by North very steep, betwixt the first and second buoy it is four fathom deep at low Tide.

From the second buoy the *Easter Eems* lieth in East and by South, and East S. E. and by little more Southerly, with a Flood men must go on from the second buoy at least East and East and by North, not for to be carried within the foresaid point of *Brewers Plate*. *Juyt* riff is inwards from the second buoy flat, you can sound it in six fathom, and come not nearer it, least you sail within *Memersand*, being a Tail and shooting off from the foot strand within *Juyt* from *Memersand*, as soon as you get deeper water, so run first East South-east, and afterwards on South-east to the beacon up *High-horn* standing upon the dry sand on starboard side, and edge up to the Southwards or Westward

Memersand.

wards behind the beacon, there is road in six fathom, and good for southerly winds.

The *Easter Eems* is thwart of it wide and broad, the East end of *Borckum* is flat, you must not spare the lead in sailing out or in. About South-east and South-east and by East from the foresaid beacon lieth the buoy upon *Kings Plate*, being a Tail shooting off from the South shore, this buoy with the beacon men leave on the starboard side, betwixt them both is good road on the South shore. At *Norden* in *East Friesland* stand two Steeples, close by each other, the one is flat and thick, and the other long and small, as these Steeples come a Ships length to the Eastwards of the Eastermost side of the *Band*, being a little Island upon the *Wad*, so have you the buoy upon *Kings Plate*, which are good long marks, and when the Steeple of *Juyf* cometh to be North North east from you, they are good thwart marks of the buoy.

From the buoy upon *Kings Plate* to the buoy upon *Hambourgh* sand the Course is South-east, and South-east and by East it lieth in three fathom, this is Pilots water for great ships. Men can run from thence through a Creek and come out against the Southermost buoy up the *Wester Eems*.

For to sail through this Creek, you must leave the buoy upon *Hambourgh* sand on the larboard side, and sail along by the beacons, and leaving them on the starboard side, at both the ends of this Creek it is three fathom deep, and in the midst six fathom, and lieth about South South-west through along in the *Wester Eems*.

About a half league within *Juyf* betwixt the beacon upon the *High-horn* and the buoy upon *Kings Plate* on the East side of the *Easter Eems* lieth *Memerbalgh*. It lieth in most North, and here is a good road for small ships that are bound to the Westwards, or out into Sea. Within the *Balgh* he that runneth in by the *High-Horn* shall find good road for small ships that are bound to the Eastwards, and which is lying also in the South.

When you shall come from the Eastwards, you may sound *Juyf* Rist which is flat on the off side, without in the point of the Rist.

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Riff is a shore or a dead Balgh, with two points, and betwixt them it is three fathom and a half deep.

Note. When you will sail upwards the *Wester Eems*, you must leave all the buoys on the starboard side.

Juyft.

The Island *Juyft* lieth a great league, or a league and a half, East North-east from *Borckum* asunder, and the same is a little and low Island, the West end whereof is higher and steeper than the the midst of this Island. The Church standeth in the midst upon the land, and the Steeple is somewhat sharp, and standeth at the East end of the Church, and men cannot see the Church as but only thwart of the place of the valley. Betwixt *Borckum* and *Juyft* goeth in the *Easter Eems*.

From the West end of *Juyft* lieth off a Riff two leagues, or two leagues and a half West into the Sea on the outermost side men may sound it in three or four fathom, to the Southwards of it goeth then in the *Easter Eems*.

A South-east and North-west Moon maketh without the *Eemses* the highest water.

To the East of *Juyft* lieth *Buys*, the shortest of all the Islands of this Coast, rising up in two Hoomocks, the Easterlyest is the highest and sharpest.

Betwixt *Juyft* and *Buys* goeth in the the *Buys-deep*, the Counsell of *Emden* was wont to set it with buoys, but no more, for it is shift so oftentimes.

Norderney. *Norderney* lieth two leagues to the Eastwards of *Juyft*, betwixt them both is the little Island *Buys*. *Norderney* is to be known by a broad flat Tower, standing upon the West end, but sometimes men can hardly perceive it. About the midst of the Island is a high white sand-hill, thereby it is best to be known. Betwixt *Norderney* and *Buys* goeth in the Channel *Norder-deep*.

Baltrum. A great league to the Eastwards of *Norderney* lyeth the Island *Baltrum*, which is about two leagues long, upon it is no special thing for to be known, but upon the East end is a high sand-hill, sharp above, the West end is low; as the high sand-hill is South-east and by East from you so is it round too, upon the West end goeth a swamp through.

Betwixt

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Betwixt *Baltrum* and *Norderny* runneth in a Channell called the *Wichtery*, sometimes therein is two fathom, and sometimes no more than four foot.



The Depths and Grounds of these Places.

A *Meland* men may see in twelve fathom the depth of thirteen and fourteen fathom runneth far off to Seawards, so that men cannot see it in fifteen fathom.

Schiermenk-oogh men can see in twelve fathom four leagues off the land.

Rottum and *Borckum* men may see in fifteen fathom. Thwart of *Borckum* the Ground is gross red sand, mingled with some black.

Jayst men can see in fourteen fathom, three leagues without the land it is twelve fathom.

Buys and *Norderny* men can see from the *Poap* in twelve fathom. *Baltrum* you may see in fourteen and fifteen fathom.



The Tides, and Streams.

A South-east and North-west Moon maketh high Water before the *Scholbalgh*, the *Lauers*, *Schille* and the *Wester Eems*.

Before *Emdden* and *Delfzyl* a North or North and by East, and South or South and by West Moon.

In :

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In the Easter Eems and Borckum Balgh a South South-east and North North-west Moon maketh high water.

How these Lands do shew at Sea.



Ameland sheweth thus, when you are two leagues thwart off from it.



Thus sheweth Schiermoekoogh, being two leagues off from you.



Borckum sheweth thus, sailing along by it so far as is aforesaid.



Thus sheweth Rotum, as you sail along by, two leagues from it.



Thus sheweth the Island Juyft, being about two leagues off from you.

Norderny,

Buyo.



The Islands Norderny and Buys do thus shew themselves, being two leagues from you.



Thus sheweth Baltrum, you being also two leagues off from it.

G g

XVIII.



XVII. DEMONSTRATION.

The Jaa , Weser , Elve , and Eyder , as also the other Channels betwixt Baltrum and the Hever.

LAngeroogh lyeth a league to the Eastwards of *Baltrum*, and is four great leagues long, having on the off-side a fair strand, and three or four sand-hills, whereby men know it, lying from about the midst, the tops of them are flat. Betwixt *Langeroogh* and *Baltrum* goeth in the *Acumy*, therein lye two buoys. It lyeth out by the foot-strand of *Langeroogh*, first North-east and then more Easterly, but it is not to be trusted to, for it altereth too much.

Betwixt *Langeroogh* and *Wrangeroogh* is *Spykeroogh*, being a league long, upon this Island is nothing for to know, but is black with hommocks. Betwixt *Spykeroogh* and *Langeroogh* goeth in the *Offebalgh*.

Wrangeroogh is two great leagues by East of *Langeroogh*, and is a league long, being a plain white Island. Upon the East end lye high broad white sand-hills. Upon the West end the Earl of *Oldenburgh* hath caused to be made a great Tower with two Spires: when they stand one right in the other, then you are

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are by the outer buoy of the *Weser*. Men can see the Tower two kenning off at Sea. Betwixt *Wrangeroogh* and *Spykeroogh* goeth in the *Harrel*.

The *Acumy* and *Harrel* are set both with buoys by the Wor-^{The Harrel.}thy Counsel of *Emden*, these Channels serve not but for small ships.

For to sail into the *Jade* or *Wester Weser* with a southerly wind, run to the strand of *Wrangeroogh* in four fathom, with a west wind run no further than five fathom, and lead it in so by the Strand of *Wrangeroogh* in four fathom, until you come a good way within, there you find the first buoy in five fathom at low water. Thwart of this buoy the red sand is steep, leave it on the larboord side coming in, and thwart of the buoy cometh a Tail, shooting off the South shore, which men might at unawares sail within in three fathom, the buoy is laid upon the point of this Tail.

The *Stonebalgh* goeth in by East of *Wrangeroogh*, the South side whereof is steep, and the North side flat, which men may sound, in this *Balgh* is ten foot by low Tide. From the first buoy to the second and the third the Course is East, the second is in two and a half, and the third in three fathom, upon the shoaldiest of the High-way. It is betwixt the first and third buoy uneven.

For to sail from the *Jade* to the *Weser*, so sail by the third^{The Jade.} buoy over the shoaldiest of the High-way on East North-east to the *Mellem* buoy, you have by the third buoy by low Tide no more than nine foot, but being over the shoald you get deeper water, and then you are in the *Weser*. Reckon well your Tides, for the Ebb falleth strong North North-west out of the *Jade*, and the Flood inwards very hard. For to sail up into the *Jade*, leave the foresaid third buoy on the larboord side, and go up most South unto *Hommarscheel*, coming by the dyke it is there wide and broad, without the dyke are two beacons for ships that are bound over the *Wad*. Sailing further up keep the West shore until you are thwart of the Church without a Steeple, standing by the Dyke, leave there the West shore because of the *Aemten*, shooting off from the *Veer*, lying

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somtimes dry. The West shore lyeth most South-east.

A South and North Moon maketh here high water, it floweth two fathom.

The Weser.

FOR to sail up the *Weser*, come no nearer *Wrangeroogh* than in seven fathom, edge then off from the shore in eleven fathom, and you shall find the first buoy at the coming into the *Weser*, lying in seven fathom upon the Tail of the Red Sand, *Menfer Church*, being a flat Church, in *Vroukens Land*, is then South-South-east from you. As you are thwart of the first buoy, and the West end of *Wrangeroogh* being South-South-west from you, so run you over the tail of the Red Sand in five fathom.

Menfer Church.

From the outermost buoy to the second, third, fourth and fifth the Course is due East, these all lye in seven fathom, the South side, being the Red Sand, nearest each a point different from *Menfer Church*, so that *Menfer Church* lieth from the second South and by East, from the third South, from the fourth South and by West, and from the fifth South South-west. The fifth buoy is called the buoy upon the Head; for to know that from the other, thereupon is a staffe of three foot long, and a white knot upon it. Over against the buoy upon the Head is a white buoy on the white Grounds. Betwixt all the foresaid buoys men reckon the Tides, the Flood cometh out of the North-west falling over against the Red Sand and the Ebb to the contrary. The right deep by the buoys in coming in is eleven fathom, and by the buoy upon the Head five fathom at low Tides.

Middle Plate.

Right before the *Weser* lieth the Middle-plate, the Eastermost side beginneth right by North of the buoy upon the Head by the white grounds, and is along the reach unto the third buoy, from without, and is on both sides flat for to sound about. On the West side of the foresaid Plate lieth a white buoy from *Menfer Church*, leave them in coming in on the larboard side from you.

For

For to sail from the buoy upon the Head out again to the Eastwards of this Plate unto the *Elve*. Then sound it out about the white Grounds in five fathom, until you are out in the Sea.

For to sail further up in the *Weser*, the Course from the buoy the Head unto the sixth buoy is South-east and North-west, *Menfer Church* shall lye from you South-west and by South, and the *Weser* is thwart of it about twenty fathom deep. From the sixth buoy to the seventh, being the buoy upon the Course, or *Wapper* buoy, and South-west buoy, because *Menfer Church* lyeth South-west off from it, is the Course South east. The *Jade* buoy is about South, or South and by West from this buoy. From the buoy upon the Course unto the *Mellem* buoy the Course is yet South-east, which men might sail within at unawares in six fathom. *Menfer Church* lieth off from it South-west and by West. From the *Mellem* buoy to the buoy upon *Bollenzielle* the Course is South-east, somewhat Easterly, men must there reckon very well the Tide, because the Flood falleth exceeding hard into the West shore.

Langworder Church lyeth right South and by East from the buoy upon *Bollenzielle*, over against it upon the point of the black Grounds lieth a white buoy, come no near to it by half Floud than in four fathom and a half, men might unawares sail within this point in sailing in, in four fathom. From the buoy upon *Bollenzielle* the Course is South South-east, or South-east and by South, *Langworder Church* lieth about South from this beacon, men must leave it on the starboard side in coming in, within that beacon upon *Bollenzielle* is a good Road for a westerly wind. From the beacon upon *Bollenzielle* to the first buoy upon the Flat the Course is South-east, until men come somewhat beneath the beacon, and then further along East South-east. The marks of the first buoy upon the Flat are, when men might see through the Bell-voles of the Steeple of *Langworder Church*, then men are thwart of the first buoy, and *Langworder Church* is the from you somewhat more Southerly than South South-west.

From the first buoy upon the Flat to the second, the Course

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is East South-east, betwixt these two buoys are five beacons on the larboord side, upon the black Grounds. From the second buoy to the *Meyland*, it is South-east and by South, being thwart of *Wadnis* or *Meyland*, sail by the green shore, until you come within *Blixem*.

Like as upon the *Jade* so also upon the *Wefer* a South and North Moon maketh the highest water, it floweth here two fathom and a half, up and down.

To the Eastwards of the *Wefer* lye the South Grounds of the *Elve*, therein go two fair deep Balghs of twelve fathom. The Till called the Broad-balgh is the westermost, and is so far, that men can but even see the *New-work*.

*Souther
grounds.*

If it should happen coming by East of the *Wefer*, you should be beset upon the South Grounds, being at lest shore, and be in danger, sail to the South Grounds in five fathom, and not nearer. When you shall get eight and ten fathom soft Ground, it is so certainly of the Broad-balgh, take the sounding of both sides in five fathom, and you find among the sands smooth water. The Wester Till lieth in first East South-east, by the North shore it is deepest, and on the South shore men cannot sail within any Tails, in sailing out, but men can in sailing in, coming further in it lieth more upon South.

The Easter Till is betwixt the Wester Till and the *Hond-balgh*, running in seven fathom in the Eastermost point, or the old *Schorhorn* being a Tail lying a good way off, wherein men go in seven fathom coming out the West, this lyeth also in first East South-east. here men take the sounding on both sides. Being within you shall get smooth water off the sands for all winds.

Hondbalg.

The *Hondbalgh* lieth right into by West of the *Schorhorn* buoy. If men will go in there with small ships for to sail over the *Wad* to the *Wefer*, go, having the *Schorhorn* buoy, South South-east. The *Hornbalgh* is without indifferent wide, keep this Course until you come thwart of the beacons, which men leave on the starboord side, men can well sound in by the off side of the *Schorhorn*, but not the West side; by it lie Plates, which men can sail foul of in nine fathom in coming in.

The Island Holy-land.

Holy-land and the outermost buoy in the *Weser* lye from one another, South somewhat Westerly, and North a little Easterly. By clear sight men may see *Holy-land* lying in the *Weser* by the buoy upon the Head. *Bornriff* and *Holy-land* are asunder South-west and by West, and North-east and by East two and thirty leagues. — Coming from the Westwards, and having *Holy-land* in sight it sheweth as a high reddish steep point, being above flat. For to anchor from Westwards under *Holy-land*, so run in twelve fathom. As men sail towards the South point, coming nearer to the Land, they espy a Rock like a small Tower by the high Land, called the *Monck*, being almost so high as the Land, About an *English* mile off this Rock is a Rock under water; if you keep your self in eight fathom, you run without this Rock, and cannot take hurt of of it. As the *Monck* is covered of the other Land, so are you thwart of the sunken Rock, the *Monck* being a handspikes length without the other Land, there is a Road in ten fathom, for a West South-west, North-west and North Winds, and fair ground. From the Point by which the *Monck* standeth, shooseth off a little Riff, men may sound it in three fathom, and run in five fathom from the shore, and sail clear off the sunken Rock and the Riff; but if you run into deeper water in seven fathom, men run so up the sunken Rock. In nine fathom men run about without the sunken Rock.

From the North side of *Holy-land* lieth off an evil Riff, almost a league in Sea, so that men can come no nearer the whole North side, than in nine or ten fathom. If you go about by North of *Holy-land*, being so far that the East end of *Holy-land* come to be South and South and by East from you, sail then freely to the *Scholver* Point, being a flat Point, which men may sound in six fathom. It so be that you run in eight fathom of it, you shall run above two great leagues from the shore. The Fareway betwixt *Holy-land* and the *Hever* is no more than ten fathom.

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fathom. Coming by the Point to the Road, and that *Scholvers* point lie North-east, and the Rock South-west from you, there is good lying in five fathom.

*Scholvers
Point*

Scholvers Point is the Point where the South Haven is within, lying from the high Land East into the Sea. From the outermost end of *Scholvers* Point is a Bank, in three fathom to the Point where the *Monck* also standeth, within it is very good lying for Ships of little Draught, and is called South Haven. A South South-west and North North-east Moon maketh there the highest Water.

The Elve.

THe Road of *Holyland* and the outermost buoy of the *Elve*, called the *Schor-tunne* or *Steep-buoy*, lie South-east and by East, and North-west and by West eight leagues asunder, which lieth right to the Northwards of *Schorhorn*, being the outermost end of the *New-work* Grounds. The right deep of the *Elve* goeth into the Northwards of it. On the North side of the *Elve* lye the North Grounds, lying somewhat flat far off to Seawards, upon the North-west side. The South end of the North Grounds, called *Vogelsand*, runneth from the foresaid buoy a good way West and by North into Sea, with a narrow Tail of a hard Sand, about a half league broad, which waxeth by little and little the further from the shore the deeper: it is three leagues from the foresaid buoy eleven fathom water upon it, failing from the *Steep-buoy* on N. men run over it in 3. fathom, but it doth soon deep in eight fathom soft ground; it is in the Creek of the North *Elve*. To the Southwards of the *Vogelsand* in the Fareway of the *Elve* coming from the West it is also soft ground, and thirteen fathom, to the South of it towards the Souther Grounds, it is again very hard and, steep Grounds, come no nearer them than in twelve fathom.

*Vogel-
sand.*

As you come from Westwards to the *Elve*, men find betwixt *Holyland* and the *Weser* depth of twenty fathom, until well half ways to *Holyland* towards the *Steep-buoy*, then it doth begin to

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to shoald from eighteen to sixteen and fourteen Fathom, close by the *Steen-buoy* it is twelve Fathom.

If you come by night by the steep Grounds with a Southerly wind in twelve Fathom, and go on East and by North you meet at last with the shoalding of the *New-work* Grounds, right by North of the *Houndbalgh* in eight Fathom; Ankor there, and you are so by the buoy. With Northerly winds so Ankor further from the South shore in the shoalding in twelve Fathom.

To the Northwards of the foresaid narrow Tail, lying from *Vogel-sand*, runneth in a great bight in the North Grounds, called the *Norther Elve*; it is in going somewhat within, so broad, that men can therein run windwards, but within it goeth narrow to, and at last to Nothing. It is in going in twelve Fathom, and soft Ground like the right *Elve*; by dark Weather sometimes the Ships run there with danger, especially with West North West Winds. When you perceive that you are entred in there, men can (the *New-Work* being more southerly as South East and by South from you) run over the Tail of *Vogel-sand* in five Fathom, and come against the *Steeep buoy* up the right *Elve*.

For to set Sail by night from the Road of *Holy-land*, the Course is South East and by East, and so men run over the Tail in eight Fathom, being hard and sandy Ground, if men run somewhat more southerly, men have again thirteen Fathom, and soft Ground, and the right deep of the *Elve*, betwixt *Vogel-sand* and the steep Grounds; if you run more southerly, you get again somewhat Ground of the Souther Grounds: when men come near them in eleven Fathom, edge again off unto thirteen Fathom, and by them towards the *Steeep-buoy* unto the Shoalding of *New-Works* Grounds, and stay for the daylight.

Coming by day from *Holy-land*, and the *New-works* being in sight, so bring that and the Cape one in the other; Sail so right in with them, men find the *Steeep-buoy* in eleven Fathom. From the *Steeep-buoy* to the *Kool-buoy*, the Course is due East, which is in Eight Fathom. Upon the *New-Work* stand three Country-

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meas Houses, the middlemost and the Steeple come in each other coming to the second buoy. The third buoy lieth in six fathom, from the *Kool-buoy* East and by North. The fourth buoy lieth in five fathom from the third East and by North: betwixt these buoys a little within the third runs a deep Creek East South-east in the *New-work* Grounds, called the *Kinderbalgh*, being wide, and by half Flood well nine fathom, but runneth dry to nothing. Coming by the South Grounds, men can lightly go in there, therefore the third buoy is a little further off from the South shoar. Betwixt the third and fourth buoy, by North of the Deep is a white buoy in three fathom, up the Tail of the *New ground*, where men might sail within, coming inwards; and leave it on larboord side, and all the black buoys on starboord side from you.

The white buoy and *New-work* lye North North-east and South South-west asunder, by East of it the North side is very steep. The fifth buoy is in three fathom and a half, lying from the fourth full East. The sixth buoy lyeth in six fathom, and from the fifth also East. In the right-deep by North of the black buoys from *Kool-buoy* to the Point buoy it is all six fathom. Upon the *New-work* is set a great beacon 1631. being by the Point buoy, men see this Cape and Steeple South-west and by West in each other: from this buoy to the buoy in the *Ross* the Course is South-east, and is lying in eight fathom, the *Ross* beacon coming to the Steeple of *Groen*, you are by this buoy. On the Southside betwixt the Point buoy and in the *Ross* is also another buoy, it is there exceeding steep. East South east of the Point buoy, over against the *Ross* buoy, somewhat inwards is a white buoy, upon the Tail of *Romaerl* Plate, sail within them in sailing up in four fathom, as the sharp Steeple of *Woord* is by West of *Oldenbroeck*, so is the same South from you, from thence inwards men sound *Romaerl* Plate in six fathom without danger, on the off side it is very steep.

From the *Ross* beacon to *Brunshudel* are five leagues. Betwixt the *Ross* buoy and the buoy upon *Romaerl* Plate begins a Sand lying in the midst of the Fareway two leagues long, called *Pilgroms* Sand, on it is no more then two fathom water, and upon it

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it lye three black buoys, and over against it on the North side two white buoys, sail through them, along by North, being past, men come so upon the Flat. There lye also two buoys, leave them on starboord side in sailing up, before you come to *Brunsbüttel*. All these Depths are reckoned at half Flood. From *Brunsbüttel* to the buoy upon *Salshorn* or *Friburger sand*, the Course is East and by North by the North-land.

From *Salshorn* to the buoy against the *Steur* East and by *The Steur* South, and East South-east, from the *Steur* to the buoy upon *Gringer-oords* Sand South-east, and South-east and by East, and lyeth against *Bilenburgh* more than half way, in the Deep. Berwixt this buoy and the buoy upon the *Steur* is another buoy in the Fareway. From the buoy of *Gringer-oord* to the buoy upon *Stadersand* South-east and by South, and South South-east. This buoy men must leave on the starboord side. From *Stadersand* to *Willems-fliet*, or the buoy upon the *Luye* it is South-east and S.E. and by S. and from thence to the buoy upon *Terloo* East South east. From thence to the buoy upon *Hanneball*, the Course is East and West.

From *Hannebal* to the buoy upon *Blanckenesse* Sand is the Course East and East and by North, and men must keep this buoy right with a great Tree, and then run along by the North land so long, until that you are past the foresaid buoy. Go then, being at *Blanckenesse*, as followeth.

From *Blanckenesse* Sand to the buoy in the *Bight* the Course is East South-east, and from thence to *Eckhout* East and by North, in the right Deep there is four fathom, and there lye the great Ships for to lade and unlade.

The Eyder.

Six leagues by North of the *Elve* lyeth the *Eyder*, with many Shoals, lying far off without the Land most on the South side. On the North side by the Land of *Eydersee* is a long Sand called the *New-grounds*, on the South of it lyeth *Blawoort*, the *Iron Henry*, the *Hound* and *Heck-sand*. By South from *Blawoort*

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Goort a league to Southwards of the Mouth of the *Eyder* goeth in a Deep called the *North-pipe*, wherein men sail, and come again out by the *Hound* up the *Eyder*. In the *Eyder* lye on the South side of the deep seven black buoys, in sailing in leave them on starboard side. The outermost buoy lieth from the steep buoy right North. Falling by the Land you see to the Northwards of the *Eyder* a sharp Steeple indifferent high, called *Gardinge*, bring it over the South side of the little Sand-hills lying on the North side of the *Eyder*, called the *Souther-heads*, they are then from you North-east and by North, sail right in with them, you fall with the outermost buoy, as then the sharp Steeple of *Weslinburen*, by South of the *Eyder* in *Ditmarsen*, are cast a little southerly from you, so you have the length of the buoy, and then standeth *St. Peters Church* North North-east from you.

Blawoort.

Coming out of the South-west up the foresaid marks, so run over the shoald of *Blawoort*, lying off from *Blawoort* almost half way to *Holyland*, or coming from the North bring the Steeple of *Weslinburen* East from you, sail right in until *Gardingen* cometh to the *Southerheads*, or *St. Peters Church* be North North-east from you. From the outermost to the second, third and fourth it is all one Course East South-east, the second lieth upon the shoaldest of the Deep at low water in sixteen foot, the third in four, and the fourth in five fathom.

These three buoys lye by the North side of *Blawoort* on the South side of the Deep. In sailing in leave them on starboard side. From the fourth to the fifth the Course is East, men can sail within along to the Southwards of the buoy, to wit, the buoy being southwards from you. Betwixt the buoy upon the *Hound*, and the fourth lyeth another buoy upon the North side of the Deep, up the Southermost point of the *New-grounds*, run by South of it. From the buoy upon the *Hound* to the sixth the Course is North North-east, and two fathom deep. From the sixth to the seventh North-east and by North, the Deep by North of it is three fathom. Being past the buoy, follow the Beacons on the North shore to *Hulck*, run then by South of them for to avoid a Tail of Sand coming from the East shore. From *Hulck* to *Sculpa zyl* it is East South-east, in that reach the beacons.

Buoy upon
the Hound.

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beacons are on the South side. From thence to *Tonningen* the *Eyder* is at the shouldest, and from thence further in towards the New Town, called *Froderick-stad*, there is depth enough.

Betwixt the fourth buoy upon the *Eyder* and the fifth stand two beacons a little by South of them, the Westermost upon the East point of *Blawort* and the Eastermost upon the Tail of the *Hound*. Betwixt the two beacons goeth through a Deep South-east or South-east and by East, you can run through it by the *Irons Henry* beacons, leaving them on the starboard side, until you are in the end of the North Pipe, lying from thence West in Sea. Men can sound comming out of the Sea in the North Pipe by the South shore in three fathom, until you come to the foresaid beacons, and by them North-west up unto the *Eyder*.

Along by the North shore of the *Eyder* close to the Southwards of the little Sand-hills, the *Souther-heads*, runneth yet a Land-deep East and East and by North in, and cometh again out upon the *Eyder* by the *Hulck*; that serveth but only for small Ships, there remaineth at low water but five foot.



Of the Depths and Grounds about these Places.

B *Altrum*, *Langeroogh* and *Wrangeroogh* men may see it in fifteen fathom. Thwart of *Botjadigerland*, *Keydigerland* and *Ditmarsen* the Grounds lye so far without the Land, that you cannot see the Coasts except you climbe up into the top.

About *Holyland* it is eight and nine fathom deep on the inner side, but on the West side eighteen fathom: thus men can see *Holyland* from the Westwards.

The

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The Tides and Streams of these Places.

BEfore the *Wefer*, *Elue*, as also in the *Eyder* a South and North Moon maketh high Water, the Flood cometh there out of the North-west, and the Ebb out of the South-east, running over the North Grounds. Under *Holyland* a North North-east and a South South-west Moon maketh high water.

How these Lands do shew at Sea.

Langerough sheweth thus, when you sail two leagues off from it.

Thus sheweth Dykeroogh, when it is about two leagues from you.

Thus sheweth Wrangerough when it is two leagues from you.

Holyland sheweth thus, when it is five leagues from you sheweth thus.

Holyland North-east and by East from you sheweth thus.

New-work sheweth thus, at the entering of the Elue.



XVIII. DEMONSTRATION.

The West Coast of Jutland from the Hever to Boevenbergen and the Holmes.

From the *New-work* to the *Hever* the Course is North ten leagues, men meet in the Fareway, at half way, the foresaid Sand of *Blawoort* in two fathom, there you must be careful of the Tides, for to avoid the Grounds, lying far out at Sea, the fore-flood falleth thwart over the Grounds very strong, and the Ebb to the contrary.

For to sail from *Holyland* to the *Hever*, go on North-east, somewhat Easterly, to the Grounds until you come in six or seven fathom, and then you espy the Steeple, called *Pielworm*, bring it North-east and by North from you, a Masts length to the Southwards of the Southermost Cow-house upon the Island *Nuball*, sail so towards it, you shall find the outermost buoy, from that to the second buoy go on North-east and North-east and by East, being there, *Pielworm* Steeple shall stand to the North-wards, the Course is North-east and by East, inwards you find two beacons on the starboord side upon a dry Sand, called the *Quade*, there over against cometh the North *Balgh* *The Quade.*

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Balgh in the right *Hever*. From the first beacon to the second and third, the Course is East and by North. To the Northwards of the beacons it is full of Sands where men might unawares sail within, by the third beacon cometh the Souther Balgh in the *Hever*. From the third to the two other beacons the Course is North-east and by East; being past, you come by the green Land on starboord side, there it is a square and broad Deep, from thence men sail along amidst unto *Hoesum*, and anchor thereabouts.

Without in the *Hever* the North side is steep, keep the South side until you come within the beacons, in the Channel is at half flood two fathom and a half water, and without them it is far flat. Without the *Hever* is a bank, avoid it in sailing in. A south and North Moon maketh there high Tide.

The South Balgh goeth by South of the *Quade* in, right with the Island *Uito*, and by North of it, it is a league and a half to sail to *Uito*. From *Uito* it lieth in North-east and by North, and cometh out into the *Hever*.

The North Balgh lieth in by North of the *Hever*, about East and by North from *Pielworm* right in with the Island *Nuball*, which men leave on the Larboord side, and come so into the *Hever*, against the *Quade*, men can also (coming in at the North Balgh) sail up to the Northwards from *Nuball* unto the end of *Strand*, until you come rhwart of a flat Church, and anchor there.

The Small Deep.

Four leagues to the Northwards of the *Hever* is the *Small-deep*. For to go off *Holyland* to it, go on North-east and by North, and run to the Grounds, about West and by North from *Pielworm*, the South end of *Aueren* is then North from you, seek then to the South Grounds, and you may sound by them without danger, it is flat rising ground far without the Land. On the North side lye many Sands, Shoals and Points, lying out, which men may sail within. Sail along by the South side

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side North and by East, and North North-east, and North-east, and North-east and by North, and so you will find one shoald, leave that on the larboard side. If you leave it on the starboard side, you should run in a dead balg, wherein is at the first at least seven fathom, and is running to nothing, Men can run by the shoald up the lead, until within it; coming then thwart of the south end of *Ameren*, men might unawares sail within the south grounds behind a sharp, shooting off from the grounds of *Vooren*, therefore keep the south side until you come thwart of the Island *Vooren*.

The Red Deep.

FOR to sail in at the *Red* or *Silter Deep* coming from the northwards, or out of the Sea, run in sight of the Island *Ameren*. About the midst of *Ameren* lyeth a white round hill, a little higher than the other in a low valley, bring it North-east from you, and run in so right with it, until within the Riff shooting off from *Voortrap*, which is called *Ameren-borne*, and you can take no hurt of it; you have then upon the Point of the Riff three fathom, and within the Riff twelve fathom. Sail so in, until the North end of *Ameren* be North and by East from you, and then run right with the north end of *Ameren*, until you come within the dry sand, and anchor there, or sail so far in as you will, and sound it along by the Riff. The strand of *Ameren* is a fair strand without any Tails. When the fore-said hill upon *Ameren* is East North-east from you, and you sail so right with it, then you run too near the Riff of *Silt*, the hill is then also in two parts, and the northermost is then the smallest.

For to sail in at the *Red Deep* from *Holiland*, and having gotten sight of the land, bring the north end of *Ameren* North and by East from you, until you come betwixt *Ameren* and the Riff of *Silt*; run then in along by the strand of *Ameren*, until you come about the north Point of *Ameren*; and then sail to the Eastwards, until *Ameren* lye South, and South

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South-west from you. Sail no further in this Deep to the Eastwards, for then you come against the Island *Vooren*, but well to the Northwards you may sail along betwixt *Vooren* and *Silt*, till you come before *Lift*. In *Silte* deep, upon the shoaldest it is three fathom water, being over it, there is again eight, nine, and ten fathom, there lye two Riffs, the one West South-west from *Ameren*, in four fathom, called of the *Juthes Borne*, or *Ameren Borne*, although that it be not fast to *Ameren*, for the Red Deep goeth in betwixt them both. It is not also fast unto the *Voor-traps*, or the South end of *Silt* although it cometh shooting off from it, betwixt them goeth out into Sea a Deep of about fathom and a half, the Filhermen go out dayly there to fish, and especially those of the Island *Vooren*. This Sand is also the outermost Sand of all, which lyeth on this Coast of *Jutland*.

*Ameren
Borne.*

They that use this Coast much, either for *Rypen*, or the quarters thereabout, are very much afraid of this *Ameren-Borne*, when they come off from *Holyland*, they find this shoald about West South-west from *Ameren*.

The other Sand shooteth off from the South end of *Ameren* about South, and South and by West in Sea, called by many the *Borne*, or *Ameren-Borne*.

The Haven of Lift.

ABOUT eight Leagues to the Northwards of *Silte*-deep lyeth the Haven of *Lift*, running in by North of *Silt*. For to go in there from South, run so along to the Northwards in seven fathom, until you see a little Island without the Point (lying within these outer Lands) upon which standeth a House, cometh a Masts length without the Point of *Lift*, go then in East and by South, and East South-east, keep the marks so until you be within the Point of *Lift*, edge then up to the Southward about the Point, anchoring before the *Vuch's* House, there it is nine and *Haef-sand* ten fathom deep. At the entring of the deep is a Sand, called *Haef-sand* leave it on the larboord side in coming in, it is flat on the off-side. For to avoid it coming from the North, edge so far

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far off from the shore, untill the red Cliffe comes without the Sandhills, then you may go over *Haef-sand* with Ships of a little Draught. Likewise coming out at the Channel of *Lift*, to the Northwards, sail so far that you see the Cliffe, and then you go over the foresaid Sand.

On the South side of the Channel of *Lift*, lye also two Sands along the shore, the Northermost is called *Barlingsand*, the outermost *Rust*, and lyeth by South almost thwart of the red Cliffe, betwixt these Sands and the Strand of *Silt* goeth in the Land-deep. For to sail in there coming from the Southwards, seek betimes to the Strand of *Lift* by the red Cliffe, because of the *Rust* lying off from the North end of *Lift* a little without the Strand, having the sounding of the shore, and being somewhat within, you meet then a flat from the shore, avoid it, and keep along the foot strand, there men take no hurt of it. From the inner Point of *Lift* goeth a little Riffe, being within the same, there men may anchor.

If you will go to *Lutke Tonderen*, leave that Sand (lying by South of *Jureland*) on starboord side, and run through betwixt them both. He which is bound to *Hoesum* or *Silt* must leave that on larboord side. Upon *Vooren* stand two or three Trees, keep these over the Westermost Church, and run so along to *Vooren*.

Betwixt the *Rust* and *Barling-sand* goeth a fair Channel through, called the *New-deep*, right in to the Southwards of *Rock-sand*, being a shoald, and lying to Seawards. For to sail in at the *New-deep*, bring the white Cliffe upon *Silt* East, and East and by North from you, and run in so right with it, and you fall in the *New-deep* betwixt the two banks, leaving *Rock-sand* on the larboord side, run so in by the *Rust*, but come no nearer to it than in four fathom, until you are come into the *Land-deep*, but coming against the shore, and getting shoalding off the strand, run in along by the foot strand, as is said by the *Land-deep*.

Betwixt *Haef sand*, and *Rem* goeth in a little Land-deep of a fathom and a half water. The Island *Rem* is three leagues long, and flat on the off-side, so that you shall scarce see the Land in

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six fathom. About nine leagues a Seaboord of *Silt* is another Bank along the shore of eight fathom, two leagues long. Betwixt this bank and the land it is thirteen fathom deep.

Knuyts-deep, or Ryper-deep.

*The Island
Rem.*

From the Channel of *List* to *Ryper-deep*, the Course is North and South seven leagues. For to sail into *Ryper-deep*, from the Southwards, run by the flat of *Rem* and *Mann* towards the South end of *Phann*, called *Souther-heigh*, and you shall see two Capes upon a dry sand, bring the innermost a handspikes length by North of the outermost, and then is the same East North-east from you, sail so right in, and you will find the outermost buoy on the North shore in four fathom, and go, leaving them on the larboord side, inwards East and by North-East, and East and by South to the second buoy, running by South of it, for thwart of it cometh a shoald shooting off the North shore from the Cape to the second buoy. Or keep the founding of the South shore, and run by the Lead first East and by North, then East, and at last East and by South in, upon the shoaldest it is ten foot a low water, within there it is again eight fathom. Being past the Capes, luff up to the Sand whereupon are the the Capes, and anchor there. Behind the Island *Mann* it is six fathom. With small ships you may sail behind *Rem* to *Jure-sand*.

For to sail into *Ryper-deep* from the Northwards, run on to the South end of *Phann*, until you espy the Capes. This Deep is not the best in foul weather, for it is narrow, and far off shoald without it. A South South-west and North North-east Moon maketh here high water.

About North-east from the North end of *Phann* lieth a little Hill, called *Luyberg*, a little by North of it is a long plain sand-hill, called *Langeleg*, from thence lieth the Land towards *Zuyderzigt* West North-west, and East South-east.

The Growe-deep.

THe *Growe-deep* goeth betwixt the North point of *Phanu* and *Langeleg*, run in sailing in from Southwards by *Phanu* and the North end of it, being far flat, having deeper water you see three hommocks North-east from you, upon the high land, and a flat Steeple called *Holm*, bring the Church a Cabjes length by North of the hommocks, and go in North-east, and keep the South shore, until you come within the dry Sand, called *Smeur-sand*, leave it coming in on the starboord side. The shores are both steep, but without the shores are flat. Being past the point of *Smeur-sand*, edge over to *Visdike*, and anchor *Smeur-sand* there, until you have the lowest water, sail then to *Hartingen*, *sand*. go on forth to *Woerd* lying eight leagues within the land, the River is very crooked, upon which is a Gentlemans House. A South South-west and North North-east Moon maketh there high water.

From *Phanu* to *Schellingkroegh* it is four leagues, betwixt them is *Zuyderzyd*, a little River of eight or nine foot water. The Land betwixt *Langeleg* and *Zuyderzyd* is ragged with sandhills, and rough, being grown with spire gras. Falling with the land at *Zuyderzyd*, if you cannot lead into the Channel, choose then the land of *Langeleg* in three fathom, and you miss not of this *Korneg*: for you can sound here till you come within *Schellingkroeg*, sailing in four fathom, you run so without the dry sand. *Schellingkroeg* lieth most in North-west. Coming from the North, and being bouud in this Haven, run by the dry sand in three fathom; being by the inner point of them, here shooteth off a little Tail of Sand, which you may see; coming to the East end of this sand, luff up about, until you come into the *Kroeg*, and anchor there. A South South-west and North North-east Moon maketh high Tide.

At the North end of the foresaid dry sand is *Dodenbergh*, ly- *Doden-*
ing alone: being somewhat off from it, it lyeth under the other *bergh*.
land, that you cannot see it, but as you come from the South and
North

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North you may see it. From *Doodenbergh* to the South end of the dry sand it is all along a fair strand and flat ground.

A little to the Northwards of the *Doodenbergh* is the point, called the *Horn*, by South of it is the Coast East South-east to the *Grove-deep*, by North of it North to *Westerzyd*, being a Village betwixt *Blawenbergh* and the *Horn*.

By this Point, or *Hain*, runneth off a long Bank, twelve leagues West South-west in Sea, called *Reefshorne*, lying at some places dry: Coming from the Northwards with a ship of a great draught take heed, for it is upon the North side very steep, that men shall have one cast two and twenty fathom, the next cast fifteen, and the third cast no more than three fathom.

Falling with the Land with *Westerzyd*, or by North of *Reefshorne*, then sound by the shore in seven fathom, until you come by the *Horn*, you shall find also then another shoald Riff, running off the Land, called the *Owle*, being on the North very steep, come no nearer it from the North side than in seven fathom. A little by South runneth *Reefshorn* off the shore, it is there a narrow Bank.

Reefshorn.

According to the opinion of some, *Daggers-sand* beginneth from this Bank, sailing in the moruing out of *Rinkopper-deep* with a South-west way and a North-east wind, you are about four of Clock in the afternoon yet in nine fathom, whereby appeareth the beginning of *Daggers-sand*.

The *Blawenbergh* is by North of the *Horn*, and by South of them is the Fishers Village *Westerzyd*, betwixt that and the *Horn* is one black Hommock, and also a Gentlemans House, otherwise the Land is altogether full of Hommocks thereabouts.

Rinkop-

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Rinkopper-deep.

TO the Northwards of *Blawenbergh* lieth three or four low white sandhills, and and by the Haven of *Numen* also two great white sandhills close one by the other. To Northwards of these sandhills runneth in the Haven of *Numen*, the Land is, by the Haven of *Numen* and *Doodenbergh* most South, and North seven leagues, all a fair strand, and the best to be known of this Coast, is the foresaid *Blawenbergh*, and these two white sandhills.

For to sail into *Rinkopper-dee*, or Haven of *Numen* run along by the Land of *Westerzjd* in seven fathom, until you come by the two foresaid great white sandhills, so you shall see upon a low land two Capes, upon each of them standeth a barrel. Bring them in each other, and they shall stand North from you, sail in right with them, and you shall find a buoy, except it be laid somewhere else. Right before the Haven of *Numen* is a Sand-plate, named *Gladde Jaep*.

*Gladde,
Jaep.*

For to sail in the Souther Channel, leave this Plate on the larboard side, and run in close by the South shore, or foot strand, where the aforesaid white Sandhills lie upon, right with the Capes, and there you cannot do amiss, but run in boldly by it, upon your lead; it is the surest way of all to sail in along by the strand, being careful of the lead.

Being past *Gladde Jaep*, run towards the North shore, you may sail about by it as close as you will, it is a low plain Point, altogether clean, and very steep. When you are within the Point, you may anchor where you please.

From *Rinkopper-deep*, or Haven of *Numen*, to *Baeroubergen*, the land is almost North and South, ten leagues, there is all along betwixt them a very fair and clean strand, with white sand-hills, and grown with spyrig grasse.

When you sail along by it, then you may see the blew double land of *Rinkoppen*, called the *Holmes*, over this land.

Betwixt *Baerouberghen* and the *Reafshorne* lye some banks upon.

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upon eight and nine fathom, and there lye also some banks, which are deeper, which men may sound with the lead.

The Boevenbergh.

Boevenbergh is a long smooth hill, having in the midst a high round hill, or hommock, and upon it standeth a Church with a Steeple, when you come thwart to land with *Boevenbergen*, it sheweth it self in three hills, whereof the middlemost is the highest, upon which standeth the foresaid Church, with a flat Steeple, upon both sides of them standeth also another Church, but they are not so high, you may see the Land in thirteen and fourteen fathom, the Ground is gros red Sand, and wherein are also some little stones for to know the Ground by.

When as *Boevenberghen* is East North-east from you, it sheweth and representeth it self in a long hill, having some dale, or valley in the midst on the North side, and a Church, as also a Church on the South side, and having yet another hill, or hommock, lying to the Northwards of the same.

From *Boevenberghen* to the *Holms* the land lies North North-east ten leagues, betwixt them it falleth in with a bight, it is black land with hommocks, here and there standeth a flat Steeple in the Land. About five leagues from the Land is a bank of ten fathom. Betwixt *Boevenberghen* and the *Holms* lieth the great *Jutish* Riff West into the Sea, running over it in thirteen fathom, the *Naze* is from you North-west and by North twenty four leagues, running over it in seventeen fathom, you can see the Land on the North side being gros Sand, and on the South side stony, like as Pease and Beans.

From *Boevenberghen* West North-west eight leagues it is sixteen fathom deep, gros stony sand Ground, from the Land ten leagues it is twenty fathom. From *Boevenberghen* South-west and by West nine leagues it is twenty five fathom, red and black sand Ground, that is the Ground of *Doggers-sand*.



The Depths and Grounds of these Places.

THe Grounds of the *Heaver* and the Banks of the Small Deep without *Strand* and *Eydersee* lye, at least two leagues without the Land. Betwixt *Ameren* and *Holyland* it is ten fathom deep. *Strand* is be known by the steeple of *Pielworm*, standing upon the South end of the Land. Upon *Strand* are more Churches and Steeples, but not so easie to be known.

The Island *Silt* you may see in ten fathom, on it is a high steep red Cliffe, upon the South side standeth a flat Church with a low Steeple, and to the Eastwards of it another Church, called *Heydum*, the North end of the Island is called *List*, and the South end *Voortrap*.



The Tides, and Streams.

IN the *Pipe*, *Eyder* and *Hever* a South and North Moon maketh the highest water, the Flood cometh there out of the North-west, and the Ebb of the Southeast, you may run there over the North Grounds. In the deep of *Silt* a South and North Moon maketh the highest water, the Flood cometh there out of the North-west, and falleth very little alongst the Land, and the Ebb to the contrary.

In *Knuys-deep* a South South-west and North North-east Moon maketh here high water, the Flood cometh there also out North-west, and falleth but a great quarter ride along the Land, and the Ebb to the contrary.

The Coast of Jutland.

In the Haven of *Zuyderzjd*, the *Grove-deep* and *Schellingkroegh*, a South South-west and North North-east Moon maketh the highest water, the Flood cometh there also out of the North-west, and falleth over the *Reeffhorn* towards the *Fustish* Islands, and the Ebb again to the contrary, off from the Land into Sea.

How these Lands do shew at Sea.

The North-Heads.

Tatingen.

Gatingen.



Thus sheweth the Land of Eyderstee to the Northwards of the Eyder.



Thus sheweth the Island Ameren.

List.

White-cliffe.

Red-cliffe.

Heydum.

A



Thus sheweth the Island Silt when you sail along by it.

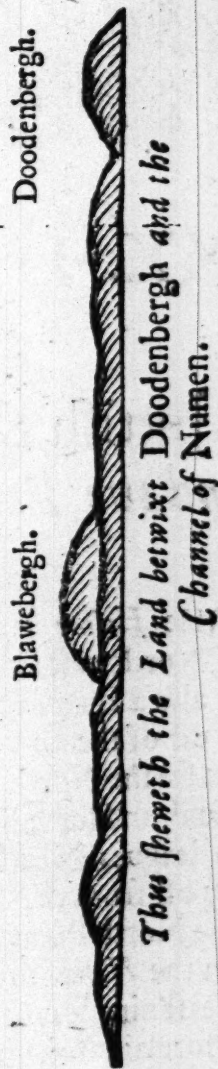
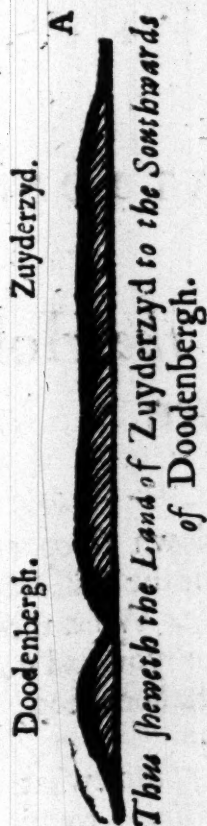
Voortrap.



These two Figures must be joyned together at A A.

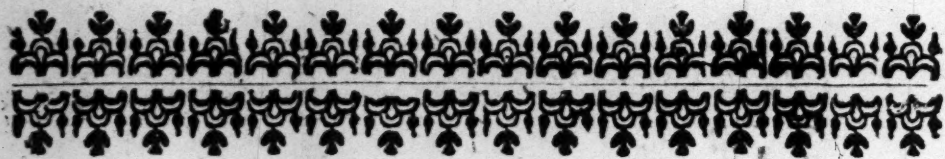
The Coast of Jutland.

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XIX. DEMON.



XX. DEMONSTRATION.

The Juttish Coasts betwixt the Holms and the Point of Schaghen.

THe *Holms* is a plain point going down steep on the North-east side, upon the middest of the Hill standeth also a square Church without a Steeple. When the highest of the Land is S. South-east from you, and you can but even see the North end of it, it is sixteen fathom deep, gross rough sand, and some little stones amongst it.

Two leagues North-east, or as some say, somewhat more Easterly off from the North Point of the *Holms*, to wit, betwixt the North Point and the *Holms*, lieth a stone-bank.

From the *Holms* to *Robbesnot*, or *Robbeknuyt*, the Course is North-east nine leagues.

The foresaid stone-bank lieth in manner as the Trindel of *Lesson*, upon which there is no more than twelve foot water, so that there remaineth about two third parts of the water betwixt the stone-bank and the North point, and the other third part betwixt the Easter point and the foresaid stone-bank: there have divers ships been lost upon it. The foresaid Easter Point lyeth about four leagues to the Eastwards of the *Holmes*, and is also a high steep Point, like the *Holmes*. Right thwart of this Easter point.

The Coast of Jutland.

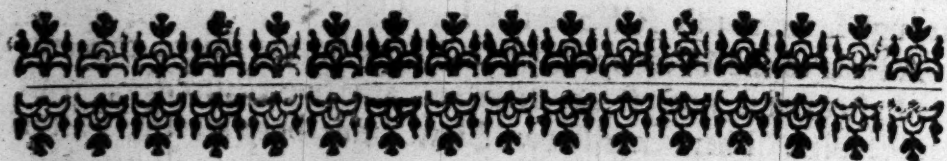
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point shooteth off a Riff almost a league off into Sea, which men may sound about in seven fathom. Some say that men may sail through betwixt this Riff and the Land.

A little to the Westwards of *Robbesnot* in the bight towards *Robbesnot*, the Eastet point, nearest to *Robbesnot*, are five Churches, with flat Steeples. There lie also two blew sands betwixt the Easter point and *Robbesnot* in the bight, you may see also a cloven hill, or sand-hill, before you come to *Robbesnot*. It is there all along a flat strond. To the Eastwards of the *Holmes* goeth in a little River called *Misdorp*. A little to the Westwards of the white Cliffe, or of *Robbesnot*, runneth in also a little River, whereupon lieth a little Town, called *Werlom*.

Robsnor, or *Robbeknuyt*, is a high round hill, on the top whereof standeth a Church with a sharp Steeple. The Land falleth away to the Eastwards from this point with a great bight towards *Hartshals*.

From *Hartshals* to *Schawe* or *Schaghen* it is East North-east *Schaghen*, eight leagues. As you come about *Schawe* from the Westwards and are bound to the *Sound*, or the *Belt*, you must take an especial care of the Tide that cometh out of the *Belt*, falling commonly out of the *Belt* towards *Norway*, especially when the Wind hath blown a while East North-east, it can carry a ship by night, or dark weather, under *Norway*, before men should think of it. It did happen, that a ship coming thwart of the Riff of *Schawe*, so that the Riff did lie South-west from her, had driven with calms in eight hours, until she came within three leagues of the Land, near about North-east of *Harmenshoof*, five leagues by West of *Mael-Strand*, so strong current there did shoot along by the Riff towards the North-east, although it doth seldom happen, that the Tide doth run there so strong out.



XX. DEMONSTRATION.

The Coast of Norway from the Soenwater to Fleckery, - and from thence unto Bergen.

From the Island *Farder* to the *Soenwater* the Course is North, but from *Bast* North and by East. The *Soenwater* goeth in most North, upon it lie many Havens and landing places, most on the starboord side as you come in. First, there is *Mossound*, a Haven that goeth up to the Eastwards, and there is *Wykerstee*, being a bight behind an Island; afterwards, *Ship-hill*, a sand Bay and a very good Road, it goeth so up along to the Northwards into *Anflo*, and then it runneth about to the southwards in the bottom.

Soenwater.

When you sail from *Farder* to *Bast* unto *Soenwater*, you shall meet with a Red Point betwixt the *Soenwater* and the *Coperwijck*. He that is bound into *Soenwater* must run along to the westwards of it, and leave it on the starboord side. When you come within the *Lams*, you shall espy a little Church upon the west land, there is the lading place of the *Coperwijck*, Men may sail up from thence to *Brakenes*. On the North or East side lieth *Holmsound*. From *Farder* to the Point of *Roghe* the Course

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Course is North North-east five leagues. At the end of *Roghe* you may anchor, there is a plain strand, you may run through betwixt the *Roghe* and *Calf*, but anchor under *Fletto*, then you must run strait through within the two small Rocks.

From *Bast* unto the *Susters* the Course is South-east five leagues. To the Southwards of the Point of *Roghe* lieth the Haven of *Elfang*, distant from the Island *Farder* North east and by East five leagues. When you come off from *Farder*, you must run through within the Rocks, which lie within the *Susters*, until you come against the land, you find then a great gray Rock, leave them on the larboard side, and the small Rocks lying there on starboard side, and so by the West land, and then the Haven open it self, being narrow, and soft Ground.

From the *Naze* (that is the Southermost point of *Norway*) *The Land* Westwards the Coast is along by the Land of *Leest* West *of Leest*. North-west, but to the Eastwards of it (without the Rocks until you are past *Fleckery*) East ten leagues, from thence to *Long-found* North-east about sixteen leagues.

This Coast is all along of high steep stony Hills, and without it full of many Rocks very strange to behold, but it hath many fair deep Havens, and good anchor ground, wherein a great abundance of boards are laden.

The first Haven by East of the *Naze* is called the *Cow* and *Calf*, after two high hills, easie to be known, the one is greater than the other, lying within the Haven upon the high land. He that will sail into this Haven from the Westwards, meet with a great Rock by East from the *Naze*, named *Melyn*, whereupon is a Warder, being past that, you shall find another out Rock, whereupon standeth also a Warder, called the *Sparrels*; betwixt these two out Rocks you must run into this Haven the *Klo*, when you come against the *Sparrels*, there lieth a sunken Rock under water, whereof you must take heed.

Somewhat within the *Sparrels* is another Rock in the fareway *Sparrels*. above water, leave them on starboard side. In sailing in so the Haven doth open it self, by little, and little, edg up to the Westwards

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wards about the Point, and Anchor there in a sand Bay in sixteen fathom, so that the two hills the Cow and the Calf stand about North-east from you.

A little to the Eastwards of the *Sparrels* is a Haven called *Scarfsound* or *Westrysen*, for to sail in there leave the *Sparrels* to the Westwards on larboard side, and all the great *Holmes* to the Eastwards, on the starboard side. Run so inwards till you come to the Haven.

Four leagues to the Eastward of *Scarfsound* lyeth the Island *Holifound*, whereupon are two great Warders; sail in to the Westwards of it until you be within it, and Anchor under the same. Thwart of it runneth in a great Sound into the land, wherein you can sail and lade.

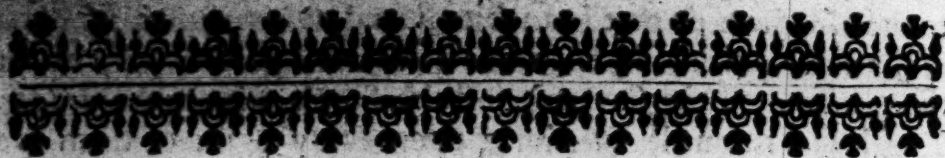
Fleckery. About three leagues East North-east from *Holifound*, and eight leagues to the Eastward of the *Naze*, is the Island and Haven of *Fleckery*, you can sail in on both sides of the Island into the Haven of *Fleckery*. The Westergate goeth in North North-east: when men come off from *Holifound*, then you see open into the Sound, you must sail along by the Rocks without *Holifound*, until you come within the Island *Fleckery*, and edge then Westwards toward the land, until you come within the *Dirveholm* where the Gallows standeth, and Anchor by the West land in eighteen fathom. You must bring out there an Anchor a head, and make a Cable fast on the Rocks upon the land. You may run from thence to the Eastwards of the Island *Fleckery*, and out again at the Eastergate East North-east into the Sea, leave then the little Island within the Warders, lying at the End of *Fleckery*, with all the great rocks by it on the starboard side, and all the black *Holmes* on the larboard side.

The Naze. From the *Naze* to the land of *Leest* the Coast lyeth West North-west. To the northwards of the land of *Leest* three leagues lyeth the Island *Winfioerd*, you go by the south of it into the Haven of *Winfioerd*, it runneth North-east in. A league to the Seawards of *Winfioerd* lye two Rocks, named the Fock-stones, and by the North of *Winfioerd* you may run into *Bergsund*, the Channel goeth East North-east in. By the North of *Bergsund* two leagues lyeth *Ecksonnd*, a fair Haven,
and

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and from thence to Westwards is the Haven, called *Seerenag*, to the Northwards of it is a white strand, whereupon is a Church at the outer point of it, and there lieth also a great Rock, named the *Walbers*, being over against the South point of the *Jedder*. The *Jedder* is four leagues long, upon every point of them is a Church, and there shooteth also off these points a Riff, the Northernmost Riff runneth North-west into Sea, and a half league North North-west of this Riff lieth a Rock, you may found by it on both sides. Thwart of the *Rutter* into Sea is the *Veeften*, about four leagues by North of the *Jedder*.

From the *Veeften* North North-east about four leagues lieth an Island before the *Fioerd* of *Stavanger*, named *Sybrichsteen*. For to sail into *Stavanger* from the Southwards, leave the *Veeften* on starboard side, and go by North of it betwixt *Veeften* and *Wirings-oogh*. From the *Veeften* to *Schnytene* the the Course is North North-west four leagues. Three leagues to the Seawards of *Schnytene* West, and West and by North lye the Rocks, called by the Seamen the *Wesiers*.



XXI. DEMONSTRATION.

For to sail through the Lieth unto Bergen.

THe *Lieth* of *Bergen* goeth through betwixt the Island *Schuytnes* and *Bock*, when *Bock* is North-east from you, so you are right before the *Lieth*. *Schuytnes* lieth on the West side, and *Bock* on the East side, it runneth in first North, and North and by West two leagues unto *Peerdeholm*, or the great *Warder*, by the same is a good Road. From the *Peerdeholm* to *Flocks* the Course is North, and North and by West three leagues. The *Flocke* lieth right without *Longhol*, which is a good Haven, and it is there fifteen fathom deep.

*Bommel-
haven:*

Over against the *Flocks* lieth *Bommel Haven*, and there is also a fair Haven, and the *Boommel-sound* runneth through the *Bommel-head* Seawards, being a high hill, and lying on the North side of the Deep, but on the South side lie many little Holms and Rocks, the Channel runneth South-east and South-west and by West into Sea.

From the *Flocks* to *Bremer-holms* the Course is North North-west two great leagues. To the Southwards or Westwards of it lieth *Monstor-haven*, there standeth a Church, and here is a good Road for ships.

From *Bremer-holm* to *Root-holm* the Course is North North-west three leagues, by South of *Root-holm* goeth out the *Soltmer-fjoerd*, going South-west Seawards. Upon the Land of *Bommel* standeth a high round hill, named the *Syck*, and hath the form of

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an Hood, whereby you may know the *Bommsl* and *Soltmerfjoerd*, for the same lieth right betwixt them both.

From *Root-holm* unto *Krabbe-church* the Course is first ^{*Root-holm*} through the narrow North-west one league, and then further to *Krabbe-church* North and by West two great leagues, betwixt them both lieth the *Reyneck-naep*, you may sail through on both sides of it. About right South from the *Reyneck-naep* run two Channels into Sea, to wit, *Papesound* and *Stormsfound*. *Papesound* goeth South South-west seawards. As you sail out from *Stormsfound*, go then close alongst by the land of *Root-holm* South and by East, leaving all the broken Islands and Hills, with that great Island on the starboard side from you, until you come into *Soltmerfjoerd*, the same runneth there S. and S. and by W. into Sea.

From *Krabbe-church* to *Bock* upon *Ra*, or *Bocklieth*, the Course North-west and by North two leagues, betwixt them goeth the *Kruysfjoerd* South-west into the Sea.

From *Bock* upon *Ra* you sail through the narrow Sea, and right by N. of *Bock* lieth a Rock under water, whereupon standeth a Beacon, or Warder. From *Bock* upon *Ra* to the *Watge-stream* the Course is N. somewhat westerly three great leagues, there is good anchoring on the S. side in 24. fathom. In the *Watge-stream* goeth the *Lieth* N. W. to the *Reesteem*, over against it lieth the Holm of *S. Olof*, you may run by it N. W. of *Jel-fjoerd* by Westwards of *Astrand* into Sea. When you come out at Sea in *Jeltesfjoerd*, then you come right against the *Reesteem* upon the *Liech*. The *Reesteem* is on the East side of the *Lieth*, right over against the point, where are two Hills, called the *Letorens*, being two sharp Hills, which you may see far off, in sailing up the *Lieth*, when you go upwards they are most N. N. W. and N. and by W. from you.

Within *Astrand* lieth *Strays-eaven*, and it is from thence to the Town of *Bergen* North North-west two leagues.

F I N I S . .